

DIFFERENT FORMS OF COUPLE COMMUNICATION
AND THEIR SIGNIFICANCE FOR RELATIONSHIP FUNCTIONING

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*L'expérience nous montre qu'aimer ce n'est point nous regarder l'un l'autre
mais regarder ensemble dans la même direction.*

Antoine de Saint-Exupéry

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ABSTRACT

The manner in which men and women in intimate relationships solve conflicts, exchange positive behaviors in everyday life, and support each other when experiencing stress may affect their relationship satisfaction and relationship stability. Previous research on couple interaction has mainly focused on negative behaviors or negative interaction contexts (e.g., conflicts), and there has been less focus on positive couple interaction. The present thesis addresses this gap and adds to the existing literature by investigating not only conflict communication, but additionally positive everyday interaction and supportive interactions (dyadic coping). The results of Study I, a longitudinal study covering 10 years, showed that dyadic coping rated by men was predictive of their relationship satisfaction 10 years later, and positive conflict communication of women was predictive of later relationship stability. Study II, a cross-sectional study, examined conflict communication, positive everyday interaction, and dyadic coping in young, middle-aged, and older couples. The results highlight the importance of positive and supportive behaviors for satisfying relationships and point to some age differences. Study III investigated the buffering effect of positivity in a cross-sectional design. The results indicate that in the context of increased negative conflict communication, positive everyday interaction and positive dyadic coping provide a valuable buffer for women's relationship satisfaction, and this holds true for young, middle-aged, and older couples. The findings are discussed with respect to implications for future research, prevention, and intervention.

ZUSAMMENFASSUNG

Die Art und Weise, wie Männer und Frauen in intimen Beziehungen Konflikte lösen, positive Verhaltensweisen austauschen und sich gegenseitig unterstützen, kann ihre Beziehungszufriedenheit und Beziehungsstabilität beeinflussen. Die bisherige Forschung im Bereich der Paarinteraktion hat sich mehrheitlich auf negative Verhaltensweisen oder negative Interaktionskontexte konzentriert (z.B. Konflikte) und der Fokus lag weniger auf positiver Paarinteraktion. Die vorliegende Dissertation geht diese Forschungslücke an und ergänzt die bestehende Literatur durch Erforschung von positiver Alltagsinteraktion und unterstützenden Interaktionen (dyadisches Coping), zusätzlich zur Konfliktkommunikation. Die Ergebnisse der Studie I, eine Längsschnittstudie über 10 Jahre hinweg, haben gezeigt, dass vom Mann eingeschätztes dyadisches Coping die Beziehungszufriedenheit 10 Jahre später voraussagte. Positive Konfliktkommunikation der Frauen war prädiktiv für die spätere Stabilität der Beziehung. Studie II, eine Querschnittstudie, untersuchte Konfliktkommunikation, positive Alltagsinteraktion und dyadisches Coping in jungen Paaren, Paaren mittleren Alters und älteren Paaren. Die Resultate unterstreichen die Wichtigkeit von positiven und unterstützenden Verhaltensweisen für zufriedenstellende Partnerschaften und zeigen einige Altersunterschiede auf. Studie III untersuchte den Puffereffekt von Positivität in einem Querschnittsdesign. Die Resultate deuten darauf hin, dass im Kontext von erhöhter negativer Konfliktkommunikation positive Alltagsinteraktion und positives dyadisches Coping einen wertvollen Puffer bieten für die Beziehungszufriedenheit der Frauen. Dies traf für junge Paare als auch für Paare mittleren Alters und ältere Paare zu. Die Ergebnisse werden im Hinblick auf Implikationen für zukünftige Forschung, Prävention und Intervention diskutiert.

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INTRODUCTION

Intimate relationships constitute an important source of happiness, support, health, and well-being in our lives (e.g., Coyne et al., 2001; Diener, Gohm, Suh, & Oishi, 2000; Diener, Suh, Lucas, & Smith, 1999; Robles, Slatcher, Trombello, & McGinn, 2014). On the other hand, relationship strain has been shown to have negative effects on men's and women's health across the life course (Umberson, Williams, Powers, Liu, & Needham, 2006). Communication processes within couples are considered to be crucial for the positive or negative development of dyadic relationships over time and to be a major determinant of relationship functioning (e.g., Karney & Bradbury, 1995; Schmitt, Kliegel, & Shapiro, 2007). Moreover, there is evidence that couples' communication is related to health (Robles & Kiecolt-Glaser, 2003) and work satisfaction (Sandberg et al., 2013). The present thesis investigates three different forms of couple communication that existing research has identified as relevant to relationship functioning: communication during conflict, positivity in everyday life (positive interactions and exchanges between partners), and dyadic coping (supportive interactions between partners, dyadic stress management). These forms of couple communication were examined in young, middle-aged, and older couples. Chapters 1 to 3 provide a literature review on conflict communication, positivity in everyday life, and dyadic coping and highlight their associations with relationship functioning. Chapter 4 reviews literature on age-related differences in communication, and chapter 5 presents social learning theory and social exchange theory. In chapters 6 to 8, three own empirical contributions are described that address longitudinal and cross-sectional associations between interaction behaviors and relationship outcome; two of them investigate couples of three age groups. The results of these contributions are summarized in chapter 9, and chapter 10 points to the strengths and limitations of the studies. Chapter 11, which focuses on implications for future research and practical implications, is followed by the conclusion (chapter 12).

1. Conflict Communication

According to Lewin (1948), marriage constitutes a small and intimate group, and “within the group life conflicts depend upon the degree to which the goals of the members contradict each other, and upon the readiness to consider the other person’s point of view” (pp. 89-90). Gottman (1993, 1994) divided marital conflict into three phases: the agenda-building phase (present views on a problem), the arguing phase (persuade one another), and the negotiation phase (reach a resolution). In research on intimate relationships, communication during conflict has been widely studied, and there is strong evidence for its association with relationship satisfaction (e.g., Stanley, Markman, & Whitton, 2002), change in relationship satisfaction (e.g., Johnson et al., 2005), and separation or divorce (e.g., Markman, Rhoades, Stanley, Ragan, & Whitton, 2010). In this chapter, cross-sectional studies (or analyses) will be reviewed first before turning to longitudinal studies. Afterwards, Gottman's (1993, 1994) typology of couples will be presented, followed by a review of studies on the demand-withdraw interaction pattern, which has received much attention in the research on couples’ conflict communication.

Cross-sectional findings. Negative interaction behavior has been found to be negatively associated with relationship satisfaction, commitment, and confidence in the relationship and to be positively associated with intention to separate (Nussbeck, Hilpert, & Bodenmann, 2012; Stanley et al., 2002). More specifically, withdrawal during conflict and avoidance of communication have been linked to lower relationship satisfaction (Bodenmann, Kaiser, Hahlweg, & Fehm-Wolfsdorf, 1998; Stanley et al., 2002), whereas positive conflict resolution has been linked to higher relationship satisfaction (Sierau & Herzberg, 2012). Comparing satisfied and dissatisfied couples, Bertoni and Bodenmann (2010) showed that the conflict styles of satisfied couples were characterized by higher levels of compromise and lower levels of offence, avoidance, and violence. Similarly, findings by Noller and Feeney

(1998) indicate that happy couples engage in more mutual discussion and negotiation, and show less conflict avoidance and destructive patterns than unhappy couples. For the resolution of differences, more future-oriented planning and less opposition seems to be beneficial (Recchia, Ross, & Vickar, 2010), and there is evidence that relationally confirming behavior during arguments (i.e., respondents reported continued love and/or commitment) was positively associated with perceived resolvability of the argument (Johnson & Roloff, 2000). Furthermore, Egeci and Gençöz (2006) highlighted the importance of confidence in one's own problem-solving skills for higher relationship satisfaction, and they also showed that communication skills (i.e., conflict tendencies) were associated with satisfaction, even after controlling for problem-solving skills and attachment style. Meta-analytic findings are in line with the results outlined above, indicating that hostility, distress, and withdrawal were related to lower relationship satisfaction, whereas intimacy behaviors and problem-solving behaviors were related to higher relationship satisfaction (Woodin, 2011). Additionally, in this meta-analysis by Woodin (2011), gender differences were reported to be small.

Another important aspect in couples' interactions seems to be understanding or perspective-taking. Perceived perspective-taking by one's partner was positively associated with relationship satisfaction (Meeks, Hendrick, & Hendrick, 1998), and in long-term marriages of at least 30 years, more positive communication skills (e.g., sharing thoughts and feelings, listening to the other person's point of view) were reported by couples with higher levels of intimacy (Robinson & Blanton, 1993). Concerning perceptions of the partner's behavior, Acitelli, Douvan, and Veroff (1993) found that perceived similarity in conflict styles is a stronger positive predictor of marital well-being than actual similarity.

Longitudinal findings. Longitudinal studies on couples' conflict communication have yielded diverse results. Lawrence et al. (2008) investigated communication behavior in the couples' first three years of marriage and Johnson et al. (2005) in the couples' first four years

of marriage. Results of the first study showed that poorer communication and conflict management skills at the beginning of marriage predicted negative rates of change in marital satisfaction; results of the second study revealed that high levels of negative skills during problem-solving discussions were more likely to lead to a sharp decline in marital satisfaction when there were low levels of positive affect, i.e., high levels of positive affect were able to mitigate the adverse effects of high levels of negative skills. In another longitudinal study over 30 months, premarital affective disengagement during problem-solving discussions was negatively related to marital satisfaction 18 and 30 months after marriage (Smith, Vivian, & O’Leary, 1990). Markman et al. (2010) assessed how premarital positive and negative communication relates to divorce five years later and how communication quality changes over time. They found that i) self-reported negative communication was a significant predictor of divorce, ii) observed positive communication of the distressed couples strongly declined over a period of five years, whereas it increased a little for the non-distressed couples, demonstrating that marital distress is connected with a decrease of positivity, and iii) in the non-distressed couples, negative communication decreased more than in the distressed couples. Adding to these findings, Birditt, Brown, Orbuch, and McIlvane (2010) reported that more destructive conflict behaviors predicted divorce over 16 years, and more constructive behaviors were associated with lower divorce rates. Furthermore, negative communication of wives decreased over time; more specifically, wives decreased in withdrawal and destructive behaviors. Findings by Noller and Feeney (1998) also provide evidence for an increase of communication quality over two years, and findings by Huston, Caughlin, Houts, Smith, and George (2001) demonstrate that there is a little decrease in a couple’s negative behavior over 13 years.

Clements, Stanley, and Markman (2004) followed couples for 13 years and showed that premarital behavior during relationship problem discussions differentiated between happily married couples, married but distressed couples, and divorced couples 13 years later.

Investigating satisfied newlyweds who divorced 10 years later and those who did not, Lavner and Bradbury (2012) found that initially satisfied couples who divorced later on displayed more negative affect and negative behaviors during problem-solving discussions as newlyweds. Interestingly, there were no differences between the two groups in commitment, positive behaviors, and relationship satisfaction. Along the same lines, Noller and Feeney (1998) suggested that negative patterns of communication, which lead to relationship problems later on, develop before marriage, and they showed that happy and unhappy couples differed in communication variables at the time of marriage and two years later. Concerning the frequency of conflicts, there is little evidence that the amount of conflict increases over time (Kamp Dush & Taylor, 2012; Noller & Feeney, 1998).

Not all forms of negative conflict communication have been found to be detrimental to an intimate relationship in the long run. For example, findings by Gottman and Krokoff (1989) indicate that disagreement and anger exchanges were associated with increased relationship satisfaction over three years, whereas those behaviors were inversely related to concurrent satisfaction. On the other hand, defensiveness, stubbornness, and withdrawal from interaction were reported to be dysfunctional for concurrent marital satisfaction and the development of marital satisfaction. Furthermore, wives' positive and compliant behavior was positively associated with concurrent marital satisfaction, but predicted a deterioration of marital satisfaction over time (Gottman & Krokoff, 1989). Karney and Bradbury (1997) strengthened this finding by showing that more negative behavior of wives led to less steep declines in marital satisfaction over four years. Beyond that, McNulty and Russell (2010) point to the relevance of the severity of the problems being discussed. Their results indicate that negative behaviors as blaming or rejecting may be detrimental to relationships facing minor problems, but they may be beneficial to relationships facing more severe problems. Another point of view is provided by Gottman (1994): "Negative interaction has two faces:

one potentially constructive and one potentially destructive. Which face it shows may depend on its balance with positive interaction” (p. 182).

Results of studies examining communication behaviors and, in addition, aggression, hostility, or neuroticism indicate that communication distinguishes between maritally satisfied and dissatisfied couples, whereas aggression, hostility, and neuroticism distinguish between couples who remain married and couples who separate or divorce (Rogge, Bradbury, Hahlweg, Engl, & Thurmaier, 2006; Rogge & Bradbury, 1999). Furthermore, communication was associated with rates of change in marital satisfaction over four years, whereas neuroticism was related to initial marital satisfaction (Karney & Bradbury, 1997). Thus, there is some evidence that different variables predict relationship satisfaction and relationship stability.

Gottman’s typology of couples and the balance theory of marriage. Gottman (1993) proposed five types of couples on the basis of observed behavior during conflict interactions: volatile couples, validating couples, conflict avoider couples, hostile couples, and hostile-detached couples. The first three groups represent stable couples and the last two groups represent unstable couples. Volatile couples are conflict engagers (i.e., they confront conflict and try to persuade one another), and their interactions were characterized by high levels of both positive and negative effect. Validating couples are conflict engagers as well, and their interactions were characterized by validation of the other partner’s point of view, but they also involved conflict and disagreement. Interactions of conflict avoider couples were characterized by little emotion expression and little persuasion attempts. Conflict avoider couples rather emphasized the positive aspects of the marriage than the differences (Gottman, 1993, 1994). Hostile couples directly engaged in conflict, and their interactions involved high levels of defensiveness. Hostile-detached couples were described as detached and emotionally uninvolved (Gottman, 1993, 1994). Another typology of couples is presented by Fitzpatrick

(1988), and Gottman (1993, 1994) points to the convergence of the regulated couples identified by him and Fitzpatrick's description of traditionals (validating couples), independents (volatile couples), and separates (conflict avoider couples).

Furthermore, Gottman's (1993, 1994) balance theory of marriage postulates a ratio of positive to negative behaviors of 5:1 for stable couples, whereas in unstable couples negativity typically outweighs positivity. Four forms of negative behavior – “The Four Horsemen of the Apocalypse” – were described as particularly detrimental to marital stability: criticism, contempt, defensiveness, and stonewalling/withdrawal (Gottman, 1994). In his later research, he added “belligerence” to “The Horsemen of the Apocalypse”, a behavior that involves provocation and that challenges the other partner (Gottman, Coan, Carrere, & Swanson, 1998).

Demand-withdraw communication. An important communication pattern related to conflict behavior and relationship functioning is the demand-withdraw pattern (see Christensen, 1988). In this pattern, “one member (the demander) criticizes, nags, and makes demands of the other, while the partner (the withdrawer) avoids confrontation, withdraws, and becomes defensive” (Eldridge & Christensen, 2002, p. 289). Various studies investigating the demand-withdraw pattern in marital conflict reported that demanding behavior was more likely to be displayed by the partner initiating the conflict, and that this pattern was negatively linked to relationship satisfaction (e.g., Baucom, McFarland, & Christensen, 2010; Caughlin & Huston, 2002; Falconier & Epstein, 2011; Papp, Kouros, & Cummings, 2009; see Eldridge & Christensen, 2002, for a review). The pattern of wife-demand/husband-withdraw was more likely than the pattern of husband-demand/wife-withdraw, but only in situations in which wives wanted change; when discussing a change husbands wanted, both patterns were equally likely (Christensen & Heavey, 1990). However, among highly distressed couples, the pattern

of wife-demand/husband-withdraw was more prominent, regardless of whose issue was being discussed (Eldridge & Christensen, 2002).

The negative impact of the demand-withdraw pattern may be buffered if one partner expresses high levels of affection in daily life (Caughlin & Huston, 2002). In terms of topics of a conflict discussion, marital relationship issues were associated with higher likelihood of both husband-demand/wife-withdraw and wife-demand/husband-withdraw patterns (Papp et al., 2009). In same- and cross-sex couples, discussing the participants' own topics led to more demanding behavior than discussing their partners' topics, and withdrawing behavior was more frequent during their partners' topics than during their own (Baucom et al., 2010). Additionally, conflict resolution was less likely when couples engaged in demand-withdraw communication patterns (Papp et al., 2009).

2. Positivity in Everyday Life

In their reevaluation of the role that conflict plays in marriage, Bradbury, Rogge, and Lawrence (2001) state that “positive behavior in marriage has been largely overlooked” (p. 72), and they further suggest that “it may be a deficit more basic than poor management of conflict . . . that sets a marriage on a difficult path” (p. 77). On the other hand, Caughlin and Huston (2010) refer to a “voluminous literature on positive aspects of relationships” (p. 30). This chapter – in contrast to the previous chapter focusing on conflict – provides an overview of studies investigating positive interactions in couples.

Cross-sectional and short-term studies. Cross-sectional and short-term (diary) studies provide evidence for the significance of positive behaviors in couples. Daily records of pleasing and displeasing behaviors have been shown to be associated with relationship satisfaction (Wills, Weiss, & Patterson, 1974), and distressed couples engaged in fewer pleasing behaviors and more displeasing behaviors than non-distressed couples (Birchler, Weiss, & Vincent, 1975). Moreover, distressed couples undertook fewer recreational activities together and reported more conflict (Birchler et al., 1975). Janicki, Kamarck, Shiffman, and Gwaltney (2006) revealed that marital adjustment was positively related to average diary ratings of agreeableness during interactions with the partner and negatively associated with ratings of conflict. Additionally, better marital functioning was related to more frequent highly agreeable spousal interactions, whereas there was no negative association with the frequency of highly conflictual interactions. Remarkably, only agreeableness acted as an independent predictor of marital adjustment when average diary ratings of agreeableness and conflict during interactions were analyzed simultaneously. Similarly, Nussbeck et al. (2012) showed that positive interaction behavior explained additional variance in relationship satisfaction beyond the variance accounted for by negative interaction behavior. Assessing dinnertime interactions and conflict discussions, findings by

Driver and Gottman (2004) indicate that playfulness and enthusiasm in daily interactions contribute to humor and affection during conflict discussions.

Furthermore, compliments and gratitude in daily interactions have been investigated. This research has demonstrated that the number of compliments given and received is positively associated with relationship satisfaction (Doohan & Manusov, 2004), and that one's felt and expressed gratitude were positively associated with one's own relationship satisfaction (Gordon, Arnette, & Smith, 2011). Additionally, one's felt gratitude was also positively related to the partner's relationship satisfaction (Gordon et al., 2011). In another diary study over two weeks, felt gratitude as a response to the partner's thoughtful behavior was linked to increased relationship satisfaction the next day for both partners, that is, for recipient and benefactor (Algoe, Gable, & Maisel, 2010; see also Algoe, Haidt, & Gable, 2008). Concerning positive-engagement behaviors (a communication style characterized by responsiveness, warmth, and cooperation) during conflict-resolution discussions, there is evidence that these behaviors are reciprocated within a dyad; that is, if the husband was particularly positive with his wife, the wife was particularly positive with her husband (Ackerman, Kashy, Donnellan, & Conger, 2011). Similarly, acting in a responsive manner (kind gesture or responsive touch) toward the partner was associated with enhanced feelings of intimacy in both partners (Debrot, Cook, Perrez, & Horn, 2012).

The exchange of physical affection (i.e., backrubs/massages, cuddling/holding, hugging, kissing on the lips, and kissing on the face) was positively linked to relationship satisfaction (Gulledge, Gulledge, & Stahmann, 2003). Conflict resolution seemed to be facilitated with more physical affection, but the amount of physical affection was unrelated to the amount of conflict (Gulledge et al., 2003). In a diary study over one week, interpersonal touch has also been shown to have beneficial effects on experienced intimacy and on positive affect, and moreover on psychological well-being six months after the study week (Debrot,

Schoebi, Perrez, & Horn, 2013). The benefits of physical contact were further demonstrated with respect to daily cortisol levels (Ditzen, Hoppmann, & Klumb, 2008).

Longitudinal studies. Longitudinal studies further extend the findings reported above concerning positive interactions. For example, affection expressed by wives and husbands in a positive interaction context (i.e., a love paradigm task) uniquely predicted their own and their partner's future relationship satisfaction, above and beyond emotional behavior expressed during a conflict interaction (Graber, Laurenceau, Miga, Chango, & Coan, 2011). In a longitudinal study over 13 years, Huston et al. (2001) compared three models of marital distress and divorce, the disillusionment model, the emergent distress model, and the enduring dynamics model (see also Caughlin & Huston, 2006). Their results indicate that disillusionment (i.e., deterioration of love, decrease in affection, seeing each other as less responsive) differentiated between stable couples and couples headed for divorce, and that initial levels of love, responsiveness, and negativity differentiated between stable-happy and stable-unhappy couples, consistent with the enduring dynamics model. In contrast, there was little support for the emergent distress model, that is, that increases in negative behaviors lead to divorce (Huston et al., 2001).

The self-expansion model. The self-expansion model proposed by Aron, Norman, Aron, and Lewandowski (2002) provides an explanation for why love may decline after the newlywed period, as reported by Huston et al. (2001). The model proposes that i) expanding one's potential efficacy (i.e., increasing one's physical, social, and knowledge resources), perspectives, and identities constitutes a primary human motivation, and ii) that such an expansion is generally attained by establishing intimate relationships, "because in a close relationship the other is 'included in the self' in the sense that in a close relationship, the partner's resources, perspectives, and identities are to some extent treated as one's own" (Aron et al., 2002, p. 178). Further, the model proposes that in the beginning of a relationship

when falling in love, the high feeling individuals experience when they get to know each other is attributable to a rapid expansion of self. Consequently, when both partners later in their relationship know each other already, the rate of expansion is not as great any more when a known partner becomes a better known partner (Aron et al., 2002). Thus, to maintain or enhance love in a relationship, the authors suggest that couples should engage in other self-expanding activities together, that is, in novel or challenging activities. Several studies have demonstrated a beneficial effect of shared participation in an exciting activity for relationship satisfaction, including less hostility and more acceptance in discussions with the partner after a self-expanding activity (Aron, Norman, Aron, McKenna, & Heyman, 2000; see Aron et al., 2002, for an overview).

Capitalization. Another line of research investigates capitalizing on positive events, that is, the communication of a positive event to the partner (see Langston, 1994). There is evidence that enthusiastic and constructive responses to capitalization attempts are related to higher intimacy, higher marital satisfaction, and higher relationship stability (Gable, Gonzaga, & Strachman, 2006; Gable, Reis, Impett, & Asher, 2004). Moreover, responses to positive event discussions seem to be more predictive of future relationship well-being and dissolution than are responses to negative event discussions (Gable et al., 2006). Thus, these findings suggest that sharing positive emotional experiences with the partner and the partner's response to it are of great importance for relationship satisfaction and stability. Gable and Reis (2010) concluded that “just as having supportive partners available when things go wrong is beneficial, it is also valuable to have responsive partners when things go right” (p. 247).

Maintenance strategies. According to Canary and Stafford (1992; see also Canary, Stafford, & Semic, 2002), strategies that help to maintain a relationship are positivity (e.g., acting nice and cheerful), assurances (e.g., expressions of love and commitment), openness

(discussion about the relationship, sharing thoughts and feelings), sharing tasks (e.g., engaging in household chores), and social networks (spending time with mutual friends and family). These maintenance strategies – self-reported as well as perceptions of the partner's strategies – were positively associated with the relational characteristics of liking, commitment, and control mutuality (i.e., the extent of mutual agreement on power balance) (Canary et al., 2002; Canary & Stafford, 1992). Furthermore, these associations declined after a few weeks, indicating that couples should engage in proactive maintenance behaviors regularly in order to benefit the relationship (Canary et al., 2002; for an overview see Canary & Dainton, 2006 and Stafford, 2003).

Moderating effects. Positive interaction behavior has also been shown to buffer the detrimental effects of negative interaction behavior on relationship outcome. In a 2-year longitudinal study by Huston and Chorost (1994), husbands' expression of affection (e.g., providing compliments) and maintenance behaviors (behaviors that enhance, sustain, or repair relationships) mitigated the effect of their negative behavior on wives' satisfaction, and the negative change in wives' satisfaction over two years associated with husbands' initial negative behavior was attenuated when husbands initially expressed high levels of affection. Furthermore, high levels of affectional expression attenuated the negative impact of the demand-withdraw pattern on relationship satisfaction (Caughlin & Huston, 2002), and high levels of positive affect during problem-solving interactions mitigated the adverse impact of high levels of negative skills (Johnson et al., 2005).

3. Dyadic Coping

Another form of communication is the way couples deal with stress together, the interpersonal stress management process called dyadic coping. Bodenmann (1995) defines dyadic coping as follows:

Dyadic coping encompasses all efforts of one or both partners to face and manage stress events as well as strains affecting one of the partners (indirect dyadic stress) or both together (dyadic stress). It describes coping strategies aiming at the maintenance or restoration of the structural, functional, behavioral, emotional and social balance of the whole dyadic system as well as the equilibrium of each partner. (p. 44)

Dyadic coping is divided into positive forms of dyadic coping (positive supportive dyadic coping, common dyadic coping, and delegated dyadic coping) and negative forms of dyadic coping (hostile dyadic coping, ambivalent dyadic coping, and superficial dyadic coping) (Bodenmann, 2005). In positive supportive dyadic coping, one partner helps and supports the other partner, for example, through practical advice, empathic understanding, or by expressing solidarity. Common dyadic coping refers to joint problem-solving, joint information seeking, or relaxing together, and generally both partners are involved symmetrically or complementarily. In delegated dyadic coping the partner experiencing greater stress explicitly asks the other partner to take over responsibilities in order to reduce his/her stress. Hostile dyadic coping refers to support that involves distancing, mocking, or open disinterest, or to instances when support is provided, but the seriousness of the partner's stress is minimized. In ambivalent dyadic coping the partner provides support but unwillingly or with the attitude that his/her support should not be needed. Superficial dyadic coping refers to insincere support that is provided without empathy (Bodenmann, 2005). The dyadic coping process serves different functions: It not only reduces stress for both partners, it also fosters trust in the partner and a feeling of “we-ness”; the relationship is perceived as supportive and

valuable. As such, dyadic coping plays an important role in maintaining and enhancing relationship satisfaction and stability (Bodenmann, 2000, 2005). Additionally, there is evidence that stress negatively affects the couples' communication quality (Ledermann, Bodenmann, Rudaz, & Bradbury, 2010; see also Bodenmann, 2000). The stress-divorce model proposed by Bodenmann (2004) emphasizes stress (external everyday stress) as a central variable that affects relationship quality. Four processes are described that may lead to alienation between the partners: i) stress reduces the time partners can spend together, ii) stress impairs communication quality, iii) stress affects physical and mental health, and iv) under stress, negative personality traits of the partners are likely to be revealed (Bodenmann, 2004). This model further emphasizes the importance of dyadic coping for relationship functioning.

Cross-sectional studies. Cross-sectional studies have demonstrated that dyadic coping is positively related to relationship satisfaction, constructive conflict resolution, and love (Bodenmann, Meuwly, & Kayser, 2011; Falconier, Nussbeck, & Bodenmann, 2013; Herzberg, 2013; Jensen, Rauer, & Volling, 2013; Papp & Witt, 2010; Wunderer & Schneewind, 2008). Dyadic coping has also been shown to have stronger associations with relationship satisfaction than individual coping (Herzberg, 2013; Papp & Witt, 2010), and to explain additional variance in relationship satisfaction beyond the impact of negative interaction behavior (Nussbeck et al., 2012). Furthermore, findings by Badr (2004) on different coping styles point to the relevance of congruence between spouses in their use of active engagement, and to the relevance of complementarity in (supposedly) less adaptive coping styles for marital adjustment. Two studies conducted over the course of one week revealed that adequate spousal support was associated with marital satisfaction, symptoms of depression, and perceived stress (Dehle, Larsen, & Landers, 2001), and that higher use of empathic responding in the context of daily stressors led to less marital tension the following day (O'Brien, DeLongis, Pomaki, Puterman, & Zwicker, 2009).

Longitudinal studies. Findings of longitudinal studies indicate that dyadic coping (support behavior) predicts relationship satisfaction two years after study beginning (Bodenmann, Pihet, & Kayser, 2006; Pasch & Bradbury, 1998). Bodenmann et al. (2006) found that for wives, both partner's dyadic coping was predictive for relationship satisfaction, whereas for men only their own dyadic coping was a significant predictor – a similar result was found in the cross-sectional study by Jensen et al. (2013), where husbands' support provision was critical for wives support satisfaction and marital love, but not vice versa. Furthermore, adequate support of husbands was beneficial for the course of wives' marital satisfaction over three years when wives were experiencing great role strain (Brock & Lawrence, 2008). Findings by Pasch and Bradbury (1998) provide evidence for a potentiating effect, that is, poor skills in both support providing interactions and conflict discussions predicted an increased risk of marital distress. However, strong support skills did not seem to buffer the adverse effect of poor conflict management skills (Pasch & Bradbury, 1998). Concerning relationship stability over the course of five years, Bodenmann and Cina (2005) found that stable-satisfied couples initially engaged in more dyadic coping than stable-distressed couples and separated or divorced couples. Along the same lines, Lavner and Bradbury (2012) found that satisfied newlyweds who divorced 10 years later displayed more negative support behaviors when their spouse talked about something he/she wanted to change about himself/herself than satisfied newlyweds who did not go on to divorce. In a retrospective study by Bodenmann et al. (2007), divorced individuals reported deficits in communication, problem-solving, and coping to be reasons for divorce, and everyday stress was perceived as a trigger for the decision to dissolve the relationship.

4. Age Differences

In the context of life span psychology, Ebner, Freund, and Baltes (2006) investigated personal goal orientations in younger and older adults, and their results suggest that younger adults are primarily oriented toward growth in their goals, whereas older adults are more strongly oriented toward maintenance and prevention of loss. Similarly, the dynamic goal theory of marital satisfaction proposed by Li and Fung (2011) posits that there are three types of marital goals, and that the priority of these goals changes across adulthood. The theory suggests that young couples prioritize personal growth goals (i.e., individuals' desire to improve or actualize themselves in the marriage), middle-aged couples emphasize instrumental goals (i.e., goals concerning the practical quality of marriage, e.g., housework), and old couples prioritize companionship goals (i.e., individuals' needs for relatedness in the marriage). Furthermore, Li and Fung proposed that prioritized marital goals may affect the couples' communication patterns and problem-solving strategies.

A number of studies has shown that communication behavior differs across age groups. Findings indicate that older couples, compared to middle-aged couples, express less negative emotions, are more affectionate, and are less physiologically aroused during conflict discussions (Carstensen, Gottman, & Levenson, 1995; Levenson, Carstensen, & Gottman, 1994). Furthermore, there seems to be less potential for conflict and more potential for pleasure in older couples than in middle-aged couples (Levenson, Carstensen, & Gottman, 1993). These results are consistent with socioemotional selectivity theory (Carstensen, 1993), which posits that close relationships providing positive emotional experiences gain increasing importance with age, and that “in old age emotion is the *dominant* motivating factor in social interaction” (Carstensen, 1993, p. 211). Other studies comparing middle-aged and older couples found that the partner's behavior was perceived as more positive by older individuals than by middle-aged individuals and by independent observers (Henry, Berg, Smith, &

Florsheim, 2007; Story et al., 2007), that positive and negative behavior were more strongly associated with relationship satisfaction for older couples (Henry et al., 2007), and that older couples experienced less anger during conflict discussions and rated their partners as warmer compared to middle-aged couples (Smith et al., 2009). However, in Story et al.'s (2007) and Smith et al.'s (2009) study, those effects (perceiving the partner as more positive, experiencing less anger, and rating partners as warmer) were not due to the couples' age, but due to differences in relationship satisfaction; older couples' relationship satisfaction was significantly higher than middle-aged couples' satisfaction. Furthermore, in observed behavior (behavioral coding), Smith and colleagues did not find on the whole more warmth and less negativity in older couples' conflict behavior as reported by Carstensen et al. (1995) – there was only some support for these findings in older men (Smith et al., 2009). Seider, Hirschberger, Nelson, and Levenson (2009) investigated relational pronouns in conflict discussions and reported that the usage of we-words (pronouns that focus on the couple and convey we-ness) was higher in older couples compared to middle-aged couples. Thus, it seems that older couples have a sense of interdependence and shared identity that is more pronounced than in middle-aged couples (Seider et al., 2009). A cross-sectional study on negative interaction behavior and dyadic coping showed a decrease in negativity with increasing age and less use of dyadic coping in older individuals compared to younger individuals (Meyer, Bodenmann, Binz, & Brunner, 2005). The latter finding was similarly reported by Bodenmann and Widmer (2000).

Age differences were also reported in studies that did not investigate couples (or only married individuals, as Meyer et al. (2005) did). In contrast to younger individuals, older individuals were more likely to appraise conflict situations positively, and their coping and defense strategies were characterized by greater impulse control (Diehl, Coyle, & Labouvie-Vief, 1996). Older individuals were also more likely to use avoidance-denial strategies when solving interpersonal problems and moreover, their problem-solving was more effective

(Blanchard-Fields, Mienaltowski, & Seay, 2007). Additionally, there is evidence that older individuals, compared to younger individuals, respond with less negative affect and less cardiovascular arousal to a negative social interaction task, and that such a task is rated as more enjoyable (Luong & Charles, 2014; see also Charles, Piazza, Luong, & Almeida, 2009). A daily diary study over eight days revealed that fewer interpersonal tensions were reported by older individuals compared to younger individuals, and that as a reaction to interpersonal tensions, older individuals were less likely to argue (Birditt, Fingerman, & Almeida, 2005). Furthermore, a longitudinal study with middle-aged and older couples over 13 years demonstrated that avoidance behavior displayed in conflict discussions increased over time, whereas blame, pressure, and withdrawal behaviors remained stable (Holley, Haase, & Levenson, 2013). Pointing to the fact that for younger couples avoidance may be maladaptive, Holley et al. (2013) stated that “for long-term married spouses in later stages of life, however, avoidance behaviors might shift from being maladaptive to being a neutral or even adaptive strategy” (p. 830). Along the same lines, a review by Luong, Charles, and Fingerman (2011) indicates that older adults usually have more positive social relationships compared to younger adults, and that older adults avoid arguments in order to optimize positive and reduce negative experiences.

5. Social Learning Theory and Social Exchange Theory

This chapter briefly presents two theories relevant to research on couple interaction: social learning theory and social exchange theory.

Social learning theory. According to social learning theory, positive or rewarding behaviors are related to relationship satisfaction, whereas negative or punishing behaviors are related to relationship dissatisfaction (e.g., Stuart, 1969). Thus, the interaction between two persons – “the interpersonal exchange of specific behaviors” (Karney & Bradbury, 1995, p. 5) – is the main focus of social learning theory (see also Thibaut & Kelley, 1959). The behaviors exchanged between partners affect both of them and in turn determine their tendency to engage in positive behaviors in the future and their level of relationship satisfaction (Jacobson & Margolin, 1979). Patterson and Reid (1970) described two mechanisms relevant to dyadic interactions: reciprocity and coercion. Reciprocity refers to an equal exchange of positive reinforcers between the partners, and these positive exchanges maintain the behavior of both partners. On the other hand, coercion describes the process in which negative behaviors of partner A control the behavior of partner B, and positive reinforcement maintains the behavior of partner A (Patterson & Reid, 1970). That is, “one member seeks to gain positive reinforcement from the other in exchange for negative reinforcement” (Stuart, 1969, p. 676). Negative reinforcement means the removal of an aversive stimulus, for example, negative behavior like yelling at the partner or nagging (see e.g., Bodenmann, Perrez, Schär, & Trepp, 2004). If yelling at the partner results in his or her agreeing to engage in a desired behavior, the yelling will stop but is likely to recur, because it has been positively reinforced, whereas agreeing has been negatively reinforced.

Social exchange theory. Based on the interdependence theory of Thibaut and Kelley (1959), social exchange theory posits that partners evaluate their relationship on the basis of rewards (e.g., emotional support or social status) and costs (e.g., conflicts or less time for

oneself), and that they compare them with a standard of what they think they deserve (the comparison level) and with a standard of possible alternatives (the comparison level for alternatives). If the rewards outweigh the costs satisfactorily (according to the comparison level) and other better alternatives are not available, the partners are likely to remain in the relationship (Thibaut & Kelley, 1959).

EMPIRICAL STUDIES

The goal of the present thesis is to better understand the significance of different forms of communication – conflict communication, positive everyday interaction, and dyadic coping – for relationship functioning. More specifically, the interest was in examining how each form of communication contributes to relationship functioning and whether there are differences in the specific relevance of one form of communication compared to the others. Additionally, moderation effects were examined to determine whether positivity might buffer negativity. Even though there has been much research on couple interaction, most studies focused on one form of communication (e.g., conflict communication) and did not include other forms of couple interaction, and there is still a lack of longitudinal studies examining different risk factors for relationship functioning. Still little is known about the interplay between different forms of communication with respect to relationship satisfaction. Furthermore, studies investigating age and couple interaction usually included middle-aged and older couples, but did not include young couples. Three own empirical contributions address these gaps in the existing research. The first study has a longitudinal design covering 10 years, whereas the second and the third have a cross-sectional design. The second and the third study are based on the same sample and investigate three age groups.

Study I is a longitudinal study that examined the predictive power of conflict communication and dyadic coping for relationship satisfaction and relationship stability 10 years after initial measurement. Besides communication behavior and dyadic coping, other predictors were included, namely stress level, physical and psychological well-being, and individual coping skills. The aim was to investigate which variables, assessed via self-report at the beginning of the study, best predict relationship satisfaction and stability 10 years later.

The focus of Study II was on the three different forms of communication – conflict communication, positive everyday interaction, and dyadic coping – and their associations with

relationship satisfaction. All variables were assessed via questionnaires, and the sample consisted of 122 young, 125 middle-aged, and 121 older couples. The aim of Study II was to examine the relevance of each form of communication for relationship satisfaction, that is, to examine which form of communication might be the most important one. Similarities and/or differences between young, middle-aged, and older couples were also investigated.

Study III investigated positive everyday interaction and positive dyadic coping and their potential buffering effects on the association between observed negative conflict communication and relationship satisfaction. Positive everyday interaction and positive dyadic coping were assessed via questionnaires, whereas negative conflict communication was assessed via behavioral coding of a conflict discussion. The sample consisted of 84 young, 69 middle-aged, and 74 older couples who expressed rather high levels of negative conflict communication. The aim of Study III was to examine whether positive and supportive behaviors buffer the adverse effects of observed negative communication, and also to examine whether positive everyday interaction or positive dyadic coping would have a stronger relative buffering effect. As in Study II, similarities and/or differences between the three age groups concerning these associations were investigated.

6. Study I: Long-Term Prediction of Relationship Satisfaction and Stability by Stress, Coping, Communication, and Well-Being¹

Abstract

In this 10-year longitudinal study, long-term relationship satisfaction and stability were predicted from communication behavior, stress level, physical and psychological well-being, as well as individual and dyadic coping skills. The predictors were assessed at the beginning of the study. Significant predictors of relationship satisfaction (n = 103 couples) for both men and women were relationship satisfaction in the beginning, and for men additionally their dyadic coping competencies. Significant predictors of relationship stability (N = 162 couples) were relationship length, relationship satisfaction of both men and women, as well as women's positive communication. The percentage of correct classifications (stable/unstable relationship) over a period of 10 years was 80.3%. Implications for research and prevention as well as the importance of coping skills for relationship outcome are discussed.

Introduction

A wide range of studies has repeatedly shown that communication is associated with relationship outcomes (e.g., Caughlin & Huston, 2002; (Markman et al., 2010)). There is also convincing evidence for the importance of individual and dyadic coping for couples' functioning (e.g., Revenson & Lepore, 2012). Other studies emphasize the importance of partner's well-being (e.g., Karney & Bradbury, 1995) or the significance of stress (e.g., Brock & Lawrence, 2008). However, previous (long-term) studies have rarely studied the interplay of these different variables for understanding relationship outcomes, with a few exceptions – for example, Lavner and Bradbury (2012) investigated communication, stress, and support behavior to predict divorce of initially happy couples 10 years later, and Lavner and Bradbury

¹ Paper by M. Ruffieux, F. W. Nussbeck, and G. Bodenmann. A manuscript of this chapter has been published in *Journal of Divorce & Remarriage* (Ruffieux, Nussbeck, & Bodenmann, 2014).

(2010) included stress, aggression, and communication in their study on patterns of change in marital satisfaction. Thus, this study aims to close this gap and add to the existing literature by jointly examining communication, individual and dyadic coping, stress, and well-being and their unique contribution to relationship satisfaction and dissolution within ten years. This study additionally adds to the literature since the average relationship length is 14.6 years in contrast to most previous studies with newlywed couples.

Stress

Various studies have shown that stress – particularly everyday stress – as well as individual and dyadic stress management is related to the satisfaction and stability of a relationship (e.g., Randall & Bodenmann, 2009). A study by Bodenmann, Ledermann, and Bradbury (2007) revealed a partial mediation, indicating a spillover of external stress on stress within the dyad, which in turn affected relationship satisfaction. Furthermore, external daily hassles had stronger associations with marital satisfaction than external critical life events. A longitudinal study by Neff and Karney (2007) found that women's high levels of external stress were associated with lower levels of their husbands' marital satisfaction, and this crossover effect was stronger in couples with poor conflict resolution skills. For wives, there was no significant stress crossover effect, but a significant interaction with their own stress, such that husbands' stress was more strongly associated with wives' satisfaction when wives' stress level was increased. In the same context, adequate support of husbands proved to be an important stress alleviating factor for wives (Brock & Lawrence, 2008). Taken together, these results highlight the detrimental impact of stress on partners, as well as the importance of a dyadic approach in the investigation of stress and relationship functioning (for an overview see Randall & Bodenmann, 2009).

Individual and Dyadic Coping

Dysfunctional coping strategies (such as passivity, resignation, blaming, rumination, etc.) are associated with lower relationship satisfaction (e.g., Herzberg, 2013). Consistently, Bodenmann and Cina (2005) reported that stable-satisfied couples, compared to stable-distressed and separated/divorced couples, displayed lower levels of dysfunctional individual coping strategies (self-blaming and passivity). On the other hand, dyadic coping – the way how couples cope together in supportive or joint dyadic coping – is consistently related with higher relationship satisfaction (Bodenmann et al., 2011; Herzberg, 2013; Papp & Witt, 2010), stability (Bodenmann & Cina, 2005) and buffering effects of stress on relationship functioning (Falconier et al., 2013).

Communication

One of the most widely investigated predictors of relationship satisfaction and stability is communication (Karney & Bradbury, 1995). Numerous studies support its high relevance for understanding couples' functioning (e.g., Gottman, 1994; Gottman et al., 1998; Markman et al., 2010). A meta-analysis by Woodin (2011) supported findings that hostility expressed during conflict was related to lower relationship satisfaction, whereas intimacy and problem solving were both linked to higher satisfaction.

In a 4-year longitudinal study on change in marital satisfaction (Johnson et al., 2005), positive skills and positive affect displayed during problem-solving interactions significantly predicted slower rates of negative change in satisfaction, while negative behaviors and negative affect significantly predicted faster rates of negative change. High levels of negative communication and low levels of positive affect led to a sharp decline in satisfaction, but high levels of positive affect mitigated the adverse impact of high levels of negative behavior. These results show that both negativity and positivity are essential variables in predicting

change in marital satisfaction. A theory in line with this notion is the social learning theory, which emphasizes that partners affect each other by exchanging positive and negative behaviors, which in turn affect their relationship satisfaction (e.g., Stuart, 1969).

Well-being

Associations between well-being and relationship variables have consistently been supported by research in psychological well-being, psychopathology, and physical health (Beach, Katz, Kim, & Brody, 2003; South, Krueger, & Iacono, 2011). A meta-analysis by Proulx, Helms, and Buehler (2007) indicates that relationship quality was positively related to personal well-being in cross-sectional as well as longitudinal studies. Similarly, Kamp Dush, Taylor, and Kroeger (2008) showed that couples with middle and high marital happiness trajectories showed a decrease in depressive symptoms, whereas those with low marital happiness trajectories did not. Although life happiness declined for all couples across 20 years, it declined least for those with high marital happiness trajectories.

Considering physical health, findings in wound healing research indicate that blister wounds healed more slowly after conflict discussions than after social support interactions, and couples whose interactions were characterized by higher levels of hostility had wounds that healed at 60% of the rate of low-hostile couples (Kiecolt-Glaser et al., 2005). To conclude, distressed relationships may constitute a risk factor for mental and physical health.

In sum, previous studies reveal that stress, individual and dyadic coping, communication, and well-being are all intertwined with the successful outcome of a marriage.

Hypotheses

Based on previous findings and the stress-divorce model proposed by Bodenmann (2004) it is hypothesized that experiencing high levels of stress is associated with lower levels of relationship satisfaction and with a higher rate of relationship dissolution 10 years later. On

the opposite, making use of (functional) individual and dyadic coping is assumed to be related to higher levels of satisfaction and to relationship stability. Based on a previous study (Karney & Bradbury, 1995) it is assumed that dyadic skills (positive communication, dyadic coping) as well as stress are among the strongest predictors of relationship outcome. Compared to communication, stress, and coping variables, well-being is supposed to be less predictive of relationship outcomes because our subjects were mostly in good psychological and physical health and only severe health problems might be predictive (see Proulx et al., 2007).

Method

Sample

The total sample consists of 162 couples. From 103 couples information on relationship status as well as relationship satisfaction after ten years was available, while 59 couples only provided us with information on relationship status. At this time 123 couples were still together whereas 39 couples had separated or divorced. From the initially 212 couples that had participated in the study at t1, four couples dropped out because of the death of one partner, the other 46 couples were no longer available because of move or the wish to no longer participate. Couples were recruited in Switzerland by means of ads in newspapers and magazines. At the beginning of the study (t1) the average duration of relationship was 14.6 years ($SD=10.0$; $Range: 0-55$) and the mean age was 40.4 years ($SD=9.0$; $Range=22-75$) for women and 42.6 years ($SD=9.1$; $Range=25-76$) for men. Eighty percent of the couples were married, 86% were living together, and 74% had children; 48% of women and 54% of men attended college or high school.

Procedure

Data were collected over the course of 10 years. Couples were recruited by means of magazine articles and advertising. At the beginning of the study (t1) the complete

questionnaire was sent to the couples, both partners were required to complete the questionnaire independently from each other. During the later times of measurement (t2 to t10), only a reduced questionnaire (assessing relationship satisfaction; posing some particular questions concerning coping, well-being, and communication) was sent to the couples.

Measures

Partnership Questionnaire (Partnerschaftsfragebogen PFB). The PFB (Hahlweg, 1996) assesses relationship quality and satisfaction by means of 31 items on a 4-point scale (0 to 3; higher scores indicating higher levels of satisfaction). Cronbach's Alpha of the entire scale was $\alpha=.92$ for women and $\alpha=.91$ for men.

Marital Communication Questionnaire (MCQ; Bodenmann, 2000). This questionnaire is based on the SPAFF codes (Gottman, 1994) and measures positive and negative communication behavior. By means of 19 items, the frequency of constructive communication (six items; understanding, caring, interest) and dysfunctional communication (13 items; criticism, contempt, belligerence, dominance, withdrawal) during conflict is assessed on a 6-point scale (1 = never, 6 = always). Cronbach's Alpha of the subscale of negative communication was $\alpha=.91$ for women and $\alpha=.92$ for men, and for the subscale of positive communication $\alpha=.89$ and $\alpha=.88$, respectively.

General stress level (GSL; Bodenmann, 2000). This scale consisting of 17 items assesses the current stress level in different areas (relationship, children, household, well-being, job, finances, free time, social relationships such as friends, neighbors, kin) with regard to its current strain. Items were rated on a 5-point scale (1 = not at all, 5 = very much). Cronbach's Alpha of the entire scale was $\alpha=.85$ for women and $\alpha=.82$ for men.

Dyadic Coping Questionnaire (DCQ). The DCQ, a previous version of the Dyadic Coping Inventory (DCI; Bodenmann, 2008), comprises 55 items and assesses couples stress

communication, mutual supportive and joint dyadic coping. Items are administered on a 6-point scale (1 = never, 6 = always). Cronbach's Alpha of the entire scale was $\alpha=.93$ for women and $\alpha=.94$ for men.

Individual Coping Questionnaire (INCOPE-2; Bodenmann, 2000). This questionnaire is a 21-item instrument based on the stress management questionnaire (SVF) by Janke, Erdmann, and Kallus (1985) and the coping questionnaire by Perrez and Reicherts (1992). Functional coping strategies comprise, e.g., positive smoothing of emotions, problem-focused information seeking, and reframing the situation. Dysfunctional coping strategies include, e.g., information suppression, rumination, and avoidance of the problem. Cronbach's Alpha of the entire scale was $\alpha=.78$ for women and $\alpha=.63$ for men.

Psychological Well-Being Questionnaire (SD-Becker; Becker, 1984). This questionnaire assesses psychological well-being on a bipolar scale with 18 items. Cronbach's Alpha of the scale was $\alpha=.66$ for women and $\alpha=.73$ for men.

Physical Well-Being Questionnaire (PSSO; Mohr, 1986). The PSSO assesses the frequency of physical symptoms with 18 items on a 5-point scale (1 = every day, 5 = never). Cronbach's Alpha was $\alpha=.83$ for women and $\alpha=.85$ for men.

Relationship Length. Duration of relationship, assessed in years, served as a control variable in the analyses.

Data Analysis

To examine which variables predict relationship satisfaction multiple regression analyses were conducted. In all regression analyses predictors of both partners were entered but only one partner's relationship satisfaction was predicted; thus, analyses were run separately for female and male partners. Couples that separated were not included in the

analysis. In order to predict relationship stability logistic regression analyses were used. For the logistic regression, a stable relationship after 10 years was coded 1 (0 else).

Results

Descriptives

In Tables 1 and 2, intercorrelations, means, and standard deviations are presented for men and for women. For women, strongest correlations were obtained between individual coping and psychological well-being and between relationship satisfaction and dyadic coping. For men, highest correlations were found between positive communication and dyadic coping and also between relationship satisfaction and dyadic coping. For women, individual coping scores and physical well-being were significantly lower than for men ($p < .001$), and relationship satisfaction was significantly higher than for men ($p < .05$). For men, stress level, negative and positive communication, and dyadic coping scores were significantly lower compared to the scores of women ($p < .001$). Relationship satisfaction 10 years later (RS10) was on average 2.01 (SD=0.46; Range: 0.53-2.83) for women and 1.99 (SD=0.46; Range: 0.63-2.90) for men.

Missingness Analyses

To test whether there are any differences in the predictor variables between the 162 couples included in the analyses and the 46 couples that declined participation, MANOVAs were calculated. For women, there were no significant differences. For men, there were no significant differences except for dyadic coping (not included couples: $M = 4.09$, included couples: $M = 3.92$, $p < .05$). To conclude, included and not included couples did not substantially differ in t1 characteristics overall and the results are very likely unbiased due to restricted participation.

Relationship Satisfaction

Table 3 provides the intercorrelations of all predictor variables and relationship satisfaction after 10 years (RS10). Highest correlations were obtained between relationship satisfaction at the beginning of the study and satisfaction 10 years later, for both men and women. Furthermore, initial relationship satisfaction was significantly correlated with dyadic coping for both partners.

As a next step, all predictor variables were simultaneously entered in a regression analysis. For women, their relationship satisfaction measured at the beginning of the study was a significant predictor of RS10 ($\beta = .48, p < .01$). The total amount of variance explained in RS10 was 43.2%. For men, their relationship satisfaction ($\beta = .46, p < .01$), dyadic coping ($\beta = .29, p < .05$), and individual coping ($\beta = -.29, p < .05$) measured at the beginning of the study were significant coefficients. The total amount of variance explained was 54.7%.

Next, a hierarchical regression analysis was conducted in order to determine the incremental impact of the control variable, individual and relationship variables. The variables were entered blockwise, in the first block duration of relationship was entered to serve as control variable in the analysis, in the second block all individual variables of both partners were entered (individual coping, physical and psychological well-being, stress level), and in the third block relationship variables of both partners were entered (relationship satisfaction, negative and positive communication, dyadic coping). Conducting this analysis allowed us to determine if relationship specific variables had explanatory power beyond the impact of personal (individual) variables. Thus, this analysis helps to understand if dyadic interactions are important for relationship satisfaction beyond properties of the two partners.

For women, the following variables were significant predictors: stress woman, physical well-being man, psychological well-being woman, and relationship satisfaction

woman (see Table 4). Together with relationship length they explain 37.5% of the variance in RS10.

For men, the following variables were significant predictors: individual coping woman, relationship satisfaction man, and dyadic coping man (see Table 5). Together with duration of relationship they explain 45.5% of the variance in RS10.

In order to have a more parsimonious model with variables that proved to be important for either female or male partners, only significant predictors of the previous step were entered into a subsequent model: individual coping, physical and psychological well-being, stress level, relationship satisfaction, and dyadic coping (for men and women). All variables were entered in the first block, including relationship length. For women, their own relationship satisfaction was a significant predictor ($\beta = .50, p < .01$) and the total amount of variance explained in RS10 was 39.8%. For men, their own relationship satisfaction ($\beta = .40, p < .01$) and their dyadic coping ($\beta = .32, p < .05$) were significant predictors, and the total amount of variance explained in RS10 was 52.5%. Furthermore, we tested whether there are any interaction effects between dyadic coping and stress, individual coping and stress, dyadic coping and negative conflict communication, and dyadic coping and positive conflict communication (see e.g. Bodenmann, Meuwly, Bradbury, Gmelch, & Ledermann, 2010; O'Brien, DeLongis, Pomaki, Puterman, & Zwicker, 2009). However, none of the interaction terms proved to be significant.

To sum up, women's RS10 was best explained by their own relationship satisfaction at the beginning of the study. Men's RS10 was best explained by their own relationship satisfaction and their dyadic coping measured at the beginning of the study.

Relationship Stability

At the end of the study, 123 couples still were together. The logistic regression analysis predicting continuation/dissolution of the relationship showed the following results: The complete set of predictor variables yielded a percentage of correct classifications of 81.9%. Of the couples who separated or divorced, 50% were classified correctly, and of the couples remaining together, 91.5% were classified correctly. That is, the predictor variables can serve as indicators for couples at risk, albeit not in a perfect manner. In terms of a possible screening, couples running the risk to separate may be identified and support in terms of prevention programs may be proposed. Especially, relationship length ($B = 0.14$, $SE = 0.04$, $p < .001$), positive communication of women ($B = -1.03$, $SE = 0.50$, $p < .05$), and psychological well-being of men ($B = 1.55$, $SE = 0.74$, $p < .05$) were significant predictors. For each variable, odds ratios were calculated to determine the probability of having a stable relationship 10 years later comparing a high score on the respective variable (mean plus one standard deviation) to the average level on this variable (mean of the variable) keeping all other variables constant at the average level. The probability of having a stable relationship is 1.09 times higher in longer lasting relationships, 0.88 times higher (less high) if women show more positive communication and 1.06 times higher if men have a higher initial relationship satisfaction.

Second, a hierarchical logistic regression analysis was conducted to identify the most important variables for relationship stability. Considering only duration of relationship and individual variables (individual coping, physical and psychological well-being, stress level), duration of relationship ($B = 0.08$, $p < .01$) and woman's stress level ($B = -0.87$, $p < .05$) were significant predictors, and the percentage of correct classifications was 77.0%. Considering all variables (and entering the relationship variables in an additional block keeping all previously determined significant predictors), relationship length ($B = 0.14$, $p < .001$), relationship

satisfaction man ($B = 1.73, p < .05$) and woman ($B = 1.62, p < .05$), as well as positive communication woman ($B = -0.93, p < .05$) proved to be significant predictors. The percentage of correct classifications was 80.0%. In a last step, only relationship length, stress woman, relationship satisfaction man and woman, as well as positive communication woman were entered in the logistic regression model to have the most parsimonious model. The percentage of correct classifications was 80.3%. This final model is presented in Table 6. Of the couples who separated or divorced, 36.1% were classified correctly, and of the couples remaining together, 93.4% were classified correctly. Again, odds ratios were calculated, this time only considering the relevant variables. As can be seen in Table 6, the odds of having a stable relationship ten years later are 1.08 times higher if both men and women have an above-average relationship satisfaction in the beginning. Notably, if positive communication of women is more often, couples are less likely to have a stable relationship 10 years later. Further examination of this unexpected result revealed that the correlation between women's positive communication and relationship stability 10 years later was negative ($r = -.10, p = .23$), albeit not significant. This points to a suppressor effect, but contrary to the expectations the bivariate association was not positive.

Additionally, we examined whether there are any interaction effects between dyadic coping and stress, individual coping and stress, dyadic coping and negative conflict communication, and dyadic coping and positive conflict communication explaining relationship stability. Again, none of them turned significant.

Discussion

The purpose of the current investigation was to examine the interplay of different risk factors known in couple research and to determine which variables best predict relationship satisfaction and stability 10 years later. Predictor variables were stress, individual and dyadic

coping, positive and negative communication, as well as physical and psychological well-being assessed at the beginning of the study.

Relationship Satisfaction

The findings show that for women, their own relationship satisfaction was the best predictor of their relationship satisfaction 10 years later. For men, their own relationship satisfaction and their own dyadic coping were the best predictors of their relationship satisfaction 10 years later. Consistent with our hypotheses, dyadic coping was, at least for men, predictive of relationship outcome. Interestingly, relationship satisfaction was the strongest predictor for both men and women. Even though communication, stress, individual coping, and well-being were reported to be associated with relationship satisfaction in other studies (Johnson et al., 2005; Lavner & Bradbury, 2010; Neff & Karney, 2007; Bodenmann & Cina, 2005; Proulx et al., 2007), these findings could not be replicated in this study for the prediction of relationship satisfaction 10 years later, at least not in the final parsimonious model. Thus, relationship satisfaction seems to be quite stable over time and highly predictive of a couple's adjustment years later. The reported differences from previous studies may be due to the fact that they used mainly samples of newlywed couples with a shorter relationship length compared to the couples in this study ($M = 14.6$ years) and with less variability in relationship satisfaction at the beginning of the study. In our sample, relationship satisfaction at t1 has already been affected by communication, stress, and individual coping. Thus, in our prediction, we controlled for the effects those variables have already had on relationship satisfaction until the beginning of the study, and we are predicting residualized satisfaction in the second decade of a relationship. This might be a reason for the divergent results.

Additionally, dyadic coping of men was predictive of their own later relationship satisfaction, which is consistent with previous findings (e.g., Papp & Witt, 2010), showing that dyadic coping is strongly associated with relationship quality. For men, engaging in joint

problem-solving and stress management with their partner is of great importance for their relationship satisfaction in the long run. For women, on the other hand, dyadic coping was not predictive of their later relationship satisfaction, probably because women's social network is more sustainable than men's and they do not only rely on their partner when experiencing stress.

Relationship Stability

To predict relationship stability, the same variables were used as for the prediction of relationship satisfaction. When all predictors were considered, it was possible to correctly predict relationship status 10 years later in 81.9% of the cases. In the final model the percentage of correct classifications was 80.3%. The analyses indicate the following meaningful predictors: relationship length, relationship satisfaction man and woman, and positive communication woman. Unexpectedly, positive communication of women was inversely correlated with a stable relationship 10 years later.

This finding supports partially previous results by Gottman and Krokoff (1989), who reported that wife's expression of anger and contempt was linked to improvement of her marital satisfaction over time, while wife's positive verbal behavior and compliance was associated with both partners' deterioration of marital satisfaction over time. However, in our study we only found that women's positivity was predictive for lower stability, but not for lower relationship satisfaction. Positive communication of women was positively associated with relationship satisfaction in the beginning and 10 years later. Thus, women's expression of positive communication behavior seems to be beneficial for relationship satisfaction, but detrimental for the stability of a relationship in the long run. Along similar lines, Gottman and Krokoff (1989) recommended “. . . wives should confront disagreement and should not be overly compliant . . .” (p. 51).

As hypothesized and similar to other findings (see Lavner & Bradbury, 2010), higher relationship satisfaction was predictive of a stable relationship 10 years later, for both men and women. This result is also consistent with the vulnerability-stress-adaptation model (Karney & Bradbury, 1995). Relationship length was a positive predictor of later relationship stability, which supports findings by Karney and Bradbury (1995).

Some limitations of this study need to be considered. First, participating couples were mostly well educated which limits generalization of findings to couples with lower levels of education. Second, all variables were self-report and share a common bias. Third, most couples were married, living together and had children, and predictors might be different for couples with no children who are neither married nor living together, thus being in a less committed relationship.

Findings from this study provide evidence for the significance of initial relationship satisfaction, stress, and skills (positive communication, dyadic coping) for relationship outcome. These variables have an impact over 10 years, which is remarkable. Moreover, being able to predict relationship stability in 80% of the cases is high, considering that over 10 years both partners' lives may change considerably. Yet, results of the logistic regression analysis should be interpreted with caution since the number of divorced couples is not very elevated. The results of the logistic regression should be cross-validated using a different data set.

Practical implications include a) strengthening the dyadic coping competencies of couples, enabling them to cope with their stress as a dyad, foster trust and increase intimacy in their relationship, and b) encouraging women to constructively address conflicts in their relationships. According to the results presented here, dyadic coping is especially important for men, and this should be considered in prevention programs and in therapy. Concerning women's communication, being positive might be favorable for relationship satisfaction, but

not for its stability. Thus, in long-lasting relationships, women should take on the task of addressing difficult issues and trying to clarify and resolve them, even if this includes communicating in a non-positive way. Further research is needed to better understand the gender differences found in this study concerning the prediction of relationship stability. Different age groups of couples would further reveal differences based on age, relationship length, and social environment (school, university, work place, retirement).

Table 1

Intercorrelations for Duration of Relationship, Coping, Stress Level, Well-being, Relationship Satisfaction, and Communication Variables Measured at the Beginning of the Study

	1	2	3	4	5	6	7	8	9
1. DR	-	.20*	-.11	-.04	-.04	-.24**	-.07	-.03	-.12
2. IC	.17*	-	-.44**	.37**	-.57**	.08	-.29**	.34**	.18*
3. Stress	-.11	-.32**	-	-.34**	.19*	-.31**	.41**	-.19*	-.29**
4. PhWB	.01	.31**	-.38**	-	-.36**	.19*	-.26**	.11	.12
5. PsWB	-.11	-.49**	.21**	-.38**	-	-.06	.18*	-.32**	-.20*
6. RS at t1	-.20*	.22**	-.26**	.11	-.03	-	-.40**	.28**	.64**
7. NC	.01	-.34**	.21**	-.10	.21**	-.47**	-	-.21**	-.31**
8. PC	-.16*	.19*	-.03	-.02	-.05	.42**	-.21**	-	.47**
9. DC	-.07	.23**	-.12	.08	-.02	.67**	-.40**	.57**	-

Note. N = 162 couples. Intercorrelations for women are presented above the diagonal, and intercorrelations for men are presented below the diagonal. DR = duration of relationship; IC = individual coping; PhWB = physical well-being; PsWB = psychological well-being; RS = relationship satisfaction measured with the PFB (Partnership Questionnaire); NC = negative communication; PC = positive communication; DC = dyadic coping.

* $p < .05$, ** $p < .01$.

Table 2

Means and Standard Deviations for the Predictor Variables Used in the Study

	<i>M women</i>	<i>SD women</i>	<i>M men</i>	<i>SD men</i>
Individual Coping	3.11	0.38	3.24	0.29
Stress	2.09	0.53	1.87	0.44
Physical Well-Being	3.75	0.52	4.12	0.48
Psychological Well-Being	2.94	0.44	2.90	0.46
RS at t1	1.94	0.45	1.88	0.41
Negative Communication	2.31	0.53	2.12	0.51
Positive Communication	4.06	0.77	3.63	0.70
Dyadic Coping	4.14	0.48	3.94	0.46

Note. N = 162 couples. All variables were measured at the beginning of the study. RS = relationship satisfaction measured with the PFB (Partnership Questionnaire).

Table 3

Summary of Intercorrelations for Predictor and Outcome Variables

	1	2	3	4	5	6	7	8	9	10
1. DR	-	.22*	-.08	-.06	-.02	-.30**	-.17	-.03	-.11	-.05
2. IC	.22*	-	-.38**	.36**	-.58**	.20*	-.34**	.44**	.25**	.26*
3. Stress	-.07	-.32**	-	-.42**	.20*	-.39**	.41**	-.16	-.36**	-.32**
4. PhWB	-.02	.28**	-.32**	-	-.35**	.23*	-.33**	.18	.21*	.15
5. PsWB	-.23*	-.53**	.19	-.28**	-	-.17	.24*	-.35**	-.24*	-.22*
6. RS at t1	-.21*	.29**	-.21*	.02	.03	-	-.42**	.38**	.62**	.60**
7. NC	-.03	-.47**	.14	.05	.26*	-.39**	-	-.30**	-.31**	-.30**
8. PC	-.10	.15	.06	-.19	-.00	.39**	-.13	-	.52**	.30**
9. DC	-.06	.22*	-.12	-.08	.05	.63**	-.32**	.54**	-	.38**
10. RS10	-.15	.09	-.21*	-.08	.06	.63**	-.37**	.21*	.53**	-

Note. n = 103 couples. Intercorrelations for women are presented above the diagonal, and intercorrelations for men are presented below the diagonal. DR = duration of relationship; IC = individual coping; PhWB = physical well-being; PsWB = psychological well-being; RS = relationship satisfaction measured with the PFB (Partnership Questionnaire); NC = negative communication; PC = positive communication; DC = dyadic coping.

* $p < .05$, ** $p < .01$.

Table 4

Multiple Regression Analysis. Dependent Variable: Relationship Satisfaction of Women after 10 Years; Block 1=enter, Block 2 and 3=forward

	B	SE B	β
Step 1			
Constant	2.00	0.09	
Duration of relationship	-0.00	0.01	-.02
Step 2			
Constant	2.55	0.21	
Duration of relationship	-0.00	0.01	-.04
Stress woman	-0.26	0.09	-.30**
Step 3			
Constant	3.48	0.50	
Duration of relationship	-0.00	0.01	-.04
Stress woman	-0.27	0.09	-.31**
Physical well-being man	-0.22	0.11	-.21*
Step 4			
Constant	4.15	0.59	
Duration of relationship	-0.00	0.01	-.05
Stress woman	-0.24	0.09	-.27*
Physical well-being man	-0.26	0.11	-.25*
Psychological well-being woman	-0.20	0.10	-.21*
Step 5			
Constant	1.73	0.70	
Duration of relationship	0.01	0.00	.14
Stress woman	-0.05	0.09	-.06
Physical well-being man	-0.16	0.10	-.15
Psychological well-being woman	-0.13	0.09	-.14
Relationship satisfaction woman	0.64	0.13	.54***

Note. $R^2=.00$, $\Delta R^2=.09$ for step 2 ($p < .01$), $\Delta R^2=.05$ for step 3 ($p < .05$), $\Delta R^2=.04$ for step 4 ($p < .05$), $\Delta R^2=.20$ for step 5 ($p < .001$).

* $p < .05$, ** $p < .01$, *** $p < .001$.

Table 5

Multiple Regression Analysis. Dependent Variable: Relationship Satisfaction of Men after 10 Years; Block 1=enter, Block 2 and 3=forward

	B	SE B	β
Step 1			
Constant	2.06	0.09	
Duration of relationship	-0.01	0.01	-.12
Step 2			
Constant	0.79	0.40	
Duration of relationship	-0.01	0.01	-.21
Individual coping woman	0.42	0.13	.35**
Step 3			
Constant	-0.03	0.36	
Duration of relationship	-0.00	0.00	-.04
Individual coping woman	0.21	0.11	.17
Relationship satisfaction man	0.70	0.11	.57***
Step 4			
Constant	-0.69	0.43	
Duration of relationship	-0.00	0.00	-.06
Individual coping woman	0.21	0.11	.17
Relationship satisfaction man	0.48	0.14	.39**
Dyadic coping man	0.28	0.11	.28*

Note. $R^2=.02$, $\Delta R^2=.11$ for step 2 ($p < .01$), $\Delta R^2=.28$ for step 3 ($p < .001$), $\Delta R^2=.05$ for step 4 ($p < .05$).

* $p < .05$, ** $p < .01$, *** $p < .001$.

Table 6

Final Model of the Logistic Regression Analysis to Predict Relationship Stability

	B (SE)	Odds Ratio
Included		
Constant	-3.01 (2.36)	
Duration of relationship	0.14*** (0.03)	1.13
Stress woman	0.03 (0.48)	1.00
Relationship satisfaction woman	1.62* (0.71)	1.08
Relationship satisfaction man	1.76* (0.87)	1.08
Positive communication woman	-0.94** (0.36)	0.86

Note. $R^2 = .35$ (Nagelkerke), $.23$ (Cox & Snell). Model $\chi^2(5) = 41.51$, $p < .001$.

* $p < .05$, ** $p < .01$, *** $p < .001$.

7. Study II: Different Forms of Couple Communication and Their Association with Relationship Satisfaction in Three Age Groups²

Abstract

How couples interact with each other when discussing a conflict or providing support has repeatedly been shown to affect relationship satisfaction. Positive forms of couple interaction in everyday life, however, have been less in the focus of research. The present study examines the relevance of positive everyday interaction for relationship satisfaction in addition to conflict communication and dyadic coping. Participants were 368 heterosexual couples – 122 young, 125 middle-aged, and 121 older couples – who were in a stable relationship for at least one year. Results obtained via self-report indicate that in the second cohort, positive everyday interaction of the partner explains variance in relationship satisfaction above and beyond the other predictors. In the third cohort, besides positive interaction, also negative conflict communication of the partner explains additional variance in satisfaction. Furthermore, positive everyday interaction had buffering and compensating effects on relationship satisfaction. The findings emphasize differences between couples at different ages and point to the relevance of positive forms of communication for satisfying relationships.

Introduction

A growing body of research has demonstrated a strong association between couples' conflict communication and support behavior and their relationship satisfaction (e.g., Bodenmann, Pihet, & Kayser, 2006; Johnson et al., 2005; Lavner & Bradbury, 2012; Sullivan, Pasch, Johnson, & Bradbury, 2010). Nevertheless, most studies on couple interaction have only addressed a specific form of communication, e.g., conflict behavior, or a specific age

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group at a time. Little is known about the unique contributions of different forms of interaction behavior to relationship satisfaction in couples of different ages. The present work extends the current literature on couple interaction by investigating three different forms of couple communication – positive everyday interaction, conflict communication, and dyadic coping – and their association with relationship satisfaction in young, middle-aged, and older couples.

Positivity in everyday life

Various aspects of positive everyday interaction in couples – such as paying the partner compliments, being affectionate and attentive, expressing love – have been studied, and their relevance for relationship functioning has been documented. Still, the focus in relationship research during the past decades has been mainly on couples' ability to resolve conflicts constructively, and research on positive interactions has been less extensive. A meta analysis by Woodin (2011) revealed that positive affect and communication behaviors (e.g., curiosity, humor, validation) displayed in conflict discussions were clearly associated with higher relationship satisfaction. Graber, Laurenceau, Miga, Chango, and Coan (2011) not only investigated positive and negative emotional behaviors in adverse contexts, but also in positive contexts. Affection expressed by wives and husbands in the positive context uniquely predicted their own and their partner's relationship satisfaction 15 months later. Furthermore, the temporal course of husbands' positive emotion (i.e., maintaining affection over the course of the interaction) in the positive, but not in the adverse context, was predictive of both partners' relationship satisfaction 15 months later.

A very typical and natural form of positive interaction in everyday life is the exchange of compliments between partners. Findings by Doohan and Manusov (2004) indicate that the average number of compliments given to the partner and the feelings about the number of compliments received in the relationship are positively related to relationship satisfaction.

Women, as compared to men, appeared to be more aware of the presence or absence of compliments in their romantic relationship, but men and women alike did not significantly differ in their rating of the importance of compliments. For both partners, the most frequent response to a compliment was to return it, which may foster mutual attraction and appreciation (Doohan & Manusov, 2004). This result was corroborated by Ackerman, Kashy, Donnellan, and Conger (2011), who found dyadic reciprocity for positive-engagement behaviors (an attentive, warm, and cooperative communication style). Besides compliments, gratitude also plays an important role in couple's everyday lives. Individuals' felt gratitude (e.g., gratitude experienced for their spouse) and expressed gratitude (e.g., appreciation expressed to their spouse) were both positively associated with individual's marital satisfaction, and higher levels of felt gratitude were also associated with partner's enhanced marital happiness (Gordon et al., 2011). A longitudinal study over 13 years showed that a decrease in positivity (e.g., love, affectional expression) in early marriage was related to later divorce, but that there was only minimal support that increasing negativity predicted divorce (Huston et al., 2001).

The importance of relationship positivity was again demonstrated by Janicki, Kamarck, Shiffman, and Gwaltney (2006), who showed that marital adjustment was predicted only by agreeableness during spousal interactions, independent of how conflictual the interaction was. Studies on the exchange of physical affection (e.g., touching, hugging) indicated beneficial effects on daily salivary cortisol levels, on experienced intimacy, on positive affect, on relationship satisfaction, and on satisfaction with the partner (Debrot, Schoebi, Perez, & Horn, 2013; Ditzen, Hoppmann, & Klumb, 2008). Furthermore, enacted responsiveness (kind gesture or responsive touch) toward the partner increased feelings of intimacy in both partners (Debrot et al., 2012). Similarly, enthusiastic and constructive responses to capitalization attempts (communicating a positive event to the partner, see Langston, 1994) covary with higher intimacy and marital satisfaction, concurrently and two

months later, and to higher relationship stability two months later (Gable et al., 2006, 2004). Taken together, these findings highlight the importance of positive interaction behaviors for succeeding relationships.

Communication during conflict

Communication during a marital conflict has been widely studied and there is convincing empirical evidence for strong associations between conflict behavior and relationship satisfaction (e.g., Johnson et al., 2005), relationship stability (e.g., Gottman & Levenson, 2000), and health outcomes (e.g., Umberson, Williams, Powers, Liu, & Needham, 2006). Investigating conflict resolution styles, Sierau and Herzberg (2012) showed that positive problem solving was positively and withdrawal negatively associated with relationship satisfaction. Similar findings obtained by Bertoni and Bodenmann (2010) indicate that satisfied couples, compared to dissatisfied couples and dissatisfied couples in therapy, reported more compromising and less offensive, avoidant, and violent behavior in conflict. Likewise, in a study by Christensen and Shenk (1991), distressed couples (couples seeking marital therapy and divorcing couples) depicted less mutual constructive communication, more avoidance of communication, and more demand/withdraw communication than non-distressed couples (for a review see Baucom, McFarland, & Christensen, 2010).

Ledermann, Bodenmann, Rudaz, and Bradbury (2010) indicated that marital communication in conflict situations was related to marital quality. Furthermore, communication skills seem to be a key factor in understanding relationship decline. Thus, an intervention study by Bodenmann, Bradbury, and Pihet (2009) showed that when wives increased in their positive communication from pre- to post-treatment, their husbands declined less in their relationship satisfaction following the intervention. Wives with increases in their negative problem-solving communication showed slower rates of negative change in relationship satisfaction, and husbands who decreased their negative communication

experienced higher levels of satisfaction after the intervention. With respect to long-term relationship satisfaction, conflict communication also proved to be of high importance. Heightened conflict strain has detrimental effects on relationship quality and perceived stability of the relationship, and self-reported premarital negative communication is significantly related to lower adjustment during the first five years of marriage and to later divorce (e.g., Markman, Rhoades, Stanley, Ragan, & Whitton, 2010). To conclude, the way couples handle their conflicts has strong impact on distinct relationship outcomes.

Dyadic coping

Another aspect of communication is represented by supportive communication in couples, or communication which is neither typical everyday interaction nor conflict communication but is oriented instead towards understanding and supporting of one's partner. This process includes the communication of one partner's stress, on the one hand, and the communication of the other partner's understanding or advice as reflected in emotion-oriented or problem-oriented support. In couples, dyadic coping depicts these processes. According to Bodenmann (2005), "dyadic coping has two primary objectives: the reduction of stress for each partner and the enhancement of relationship quality" (p. 41). Positive forms of dyadic coping are supportive dyadic coping (empathic understanding, helping the partner to reframe the situation, expressing solidarity), common dyadic coping (joint problem-solving), and delegated dyadic coping (explicitly asking the partner to give support); negative forms include hostile dyadic coping (support accompanied by sarcasm, open disinterest, or minimizing the seriousness of the partner's stress), ambivalent dyadic coping (support given unwillingly or with the attitude that it should not be needed or demanded), and superficial dyadic coping (not really listening to the partner, support without empathy) (Bodenmann, 2005). Dyadic coping has been shown to be substantially associated with relationship satisfaction, the course of intimate relationships, and the risk of divorce (e.g., Bodenmann & Cina, 2005; Bodenmann et

al., 2006; Herzberg, 2013; Papp & Witt, 2010; Wunderer & Schneewind, 2008). Moreover, in a recent diary study, couples with higher marital adjustment used more empathic responding (a form of relationship-focused coping), and empathic responding itself was related to less marital tension across days (O'Brien et al., 2009).

Several intervention studies have demonstrated that strengthening interpersonal coping skills is associated with an improved relationship functioning (Bodenmann et al., 2009). Thus, the way partners support each other and manage their stress jointly is crucial for the well-being of their relationship – all the more importantly as stress has adverse effects on communication quality (e.g., Ledermann et al., 2010) and on relationship perception (e.g., Neff & Karney, 2004).

Studies of all three forms of communication

So far, there are no studies to our knowledge that investigated the association and unique contributions of all three forms of communication (everyday positive, conflict, and supportive communication) with relationship satisfaction. One study, however, examined the role of positive and negative conflict communication and dyadic coping in relationship satisfaction (Nussbeck et al., 2012). This study revealed – in a sample with an average age of 50.9 years – stronger associations between dyadic coping and relationship satisfaction compared to positive interaction behavior, and a higher relevance of dyadic coping compared to negative interaction behavior in predicting relationship satisfaction. Thus, this study is among the first to address the question of how different forms of communication are associated with relationship satisfaction in different age groups of couples.

Hypotheses

The aim of this study is to examine positive everyday interaction, conflict communication (positive and negative), and dyadic coping (positive and negative) and their

association with relationship satisfaction in three different age groups. Based on the findings reported above, we expect all forms of positive communication (positive everyday interaction, positive conflict communication, and positive dyadic coping), and all forms of negative communication (negative conflict communication and negative dyadic coping) to be relevant for relationship satisfaction in all three age groups. Furthermore, we expect some differences between the three age groups. First (i), based on the Nussbeck et al. (2012) findings, it is hypothesized that in the second cohort, dyadic coping would be a stronger predictor of relationship satisfaction than conflict communication and positive everyday interaction. Second (ii), based on the Huston et al. (2001) study, indicating highest positivity at the beginning of a relationship, and findings by Levenson, Carstensen, and Gottman (1994), indicating greater affective positivity in older couples' interactions compared to middle-aged couples', we hypothesize that positive forms of interaction would be of higher relevance for relationship satisfaction in the first and the third cohort compared to the second cohort. Socioemotional selectivity theory (Carstensen, 1993), which suggests a focus on positive emotional experiences in old age, is in line with this hypothesis. Third (iii), we expect that couples in the third age cohort rate their conflict interactions as more positive than couples in the first and second cohort (Levenson et al., 1994). Fourth (iv), regarding gender, we hypothesize that women rate the positive everyday interaction of their partner higher than men do, because women tend to be more aware of this behavior (Doohan & Manusov, 2004).

Method

Sample

Participants were 368 heterosexual couples belonging to three different age groups: 20 to 35 years old (1st cohort, $n = 122$), 40 to 55 years old (2nd cohort, $n = 125$), and 65 to 80 years old (3rd cohort, $n = 121$). In the first cohort, the average relationship length was 4.7 years ($SD = 3.5$; Range = 1-17) and the mean age was 26.2 years for women ($SD = 4.6$; Range

= 19-37) and 28.1 years for men ($SD = 4.7$; Range = 20-38). In the second cohort, the relationship length was on average 18.4 years ($SD = 9.7$; Range = 1-38) and the mean age was 45.9 years for women ($SD = 4.5$; Range = 37-56) and 48.4 years for men ($SD = 4.3$; Range = 39-58). In the third cohort, the mean relationship length was 42.9 years ($SD = 12.5$; Range = 3-60) and the age of women was on average 70.0 years ($SD = 4.8$; Range = 62-80) and 71.6 years for men ($SD = 5.1$; Range = 62-82). Further demographic data are presented in Table 7. The yearly net income was for 63.3% of women between 1 and 60,000 Swiss francs (CHF), for 17.6% between 61,000 and 120,000 CHF, and 1.4% had a higher income. Regarding men, 31.0% earned between 1 and 60,000 CHF, 48.3% between 61,000 and 120,000 CHF, and 16.8% had a higher income. The sample is representative of the Swiss lower to upper middle class. The couples were recruited in Switzerland through print media, radio, (online) advertising, and address draw (concerning the 3rd cohort). The following conditions of participation were required: i) a relationship length of at least one year, ii) German as the main language in which the couple communicated, and iii) the age of one partner needed to match the age requirement of a specific cohort, while the age of the other partner could deviate from this requirement by a maximum of two years.

Data Collection

The data collection procedure was divided into two parts. In the first part, the couples were sent questionnaires which they completed at home. Each partner was instructed to complete the questionnaires individually and independently from the partner. In the second part, the couples were invited to the laboratory and completed a more comprehensive set of questionnaires (among them the questionnaires used in this study) and participated in three interaction tasks (data of this part are not reported in this article).

Measures

Positive everyday interaction (PEI; Ruffieux & Bodenmann, 2011). The PEI-scale consists of nine items and assesses the frequency of positive behavior in everyday life (e.g., “I pay my partner compliments”; “Every now and then, I bring along presents for my partner”; “I show my partner that I love him/her”) of oneself and one’s partner on a 6-point scale (1 = *never*, 6 = *always*). The items are conceptualized to depict everyday interactions in couples that reinforce and maintain positivity in the relationship and that serve a relationship maintenance function. In the analyses, the partner evaluations will be used (i.e., how one rates the behavior of his or her partner). The reliability of the scale was $\alpha = .90$ for women and $\alpha = .88$ for men.

Marital Communication Questionnaire (MCQ; Bodenmann et al., 2009). The MCQ assesses the frequency of positive (e.g., interest, validation, self-disclosure) and negative (e.g., criticism, belligerence, withdrawal) conflict communication of oneself and one’s partner on a 6-point scale (1 = *never*, 6 = *always*) and is based on the SPAFF codes (Gottman, 1994). The psychometric quality of the questionnaire is good (Bodenmann et al., 2009). For the current study, 12 of the original 19 items have been administered due to time limitations. In the analyses only partner evaluations will be used. The reliability of the subscale of positive conflict communication (PC) was $\alpha = .83$ for women and $\alpha = .78$ for men, and for the subscale of negative conflict communication (NC) $\alpha = .82$ for both women and men.

Dyadic Coping Inventory (DCI; Bodenmann, 2008). The 37-item DCI assesses the frequency of stress communication and positive, negative, and joint dyadic coping on a 5-point scale (1 = *very rarely*, 5 = *very often*). The psychometric quality of the questionnaire is good (Bodenmann, 2008). In the analyses, the partner evaluations of positive and negative dyadic coping will be used. We excluded the subscales of stress communication, common dyadic coping, and the evaluation of dyadic coping in order to have comparable measures

across the three forms of behavior. The reliability of the subscale of negative dyadic coping (NDC) was $\alpha = .76$ for women and $\alpha = .68$ for men, and for the subscale of positive dyadic coping (PDC), $\alpha = .82$ for women and $\alpha = .80$ for men.

Relationship Assessment Scale (RAS; Hendrick, 1988). Relationship satisfaction (RS) was assessed with the Relationship Assessment Scale, consisting of seven items (e.g., “How well does your partner meet your needs?”) made on a 5-point scale (Hendrick, 1988). The reliability of the scale was $\alpha = .84$ for women and $\alpha = .86$ for men.

Data Analysis

In order to test the above mentioned hypotheses, the results of Actor-Partner-Interdependence Models (APIM; Cook & Kenny, 2005), MANOVAs, and dependent *t*-tests have to be inspected. The APIM was run in Amos 20 (Arbuckle, 2011) using the multigroup-option to investigate differences between the age cohorts.

Results

Descriptive Results

Table 8 presents correlations, means, and standard deviations of all study variables, for men and women in the three age cohorts. Overall, couples were in satisfying relationships and rated their partner’s positive everyday interaction, conflict communication, and dyadic coping as good. In the second cohort, PEI was rated lowest. In the third cohort, NDC rated by women was highest, and NC rated by men was lowest compared to all others. Overall, all correlations between PEI and RS, between PC and RS, and between PDC and RS were positive. All correlations between NC and RS and between NDC and RS were negative.

For men in the first and third cohort, the strongest bivariate correlations were obtained between RS and NC and between RS and PDC. For men in the second cohort, the strongest

correlations were found between RS and NC and between NDC and NC. For women, the strongest correlation was found between PEI and RS (first cohort), between PDC and NDC (second cohort), and between PC and PDC (third cohort). Similarly to men in the first and third cohort, the correlation between PDC and RS was among the highest for women in the third cohort.

For women, there were the following differences between the three cohorts: PC was rated significantly higher in the first cohort compared to the third ($p < .01$); PEI was rated significantly higher in the first cohort compared to the second and third ($p < .001$); and NDC was rated highest in the third cohort ($p < .001$; MANOVA). For men, the following differences were found between the cohorts: PEI was significantly higher in the first cohort compared to the second cohort ($p < .01$), and NDC and RS were significantly higher in the third cohort compared to the first ($p < .05$; MANOVA).

In the first cohort, there were the following gender differences: NC, PEI, and NDC were significantly higher rated by women compared to men ($p < .05$ for NC and PEI; $p < .01$ for NDC; dependent t -test). In the second cohort, PC was significantly higher rated by men compared to women ($p < .001$), and NC was significantly higher rated by women compared to men ($p < .01$; dependent t -test). In the third cohort, PC was significantly higher rated by men compared to women ($p < .001$), NC and NDC were significantly higher rated by women compared to men ($p < .01$ for NC; $p < .001$ for NDC), and men's relationship satisfaction was significantly higher than women's satisfaction ($p < .001$; dependent t -test).

Multivariate Results

The multiple-group procedure revealed that a model with all regression weights, covariances, and residuals constrained to be equal across groups did not yield a good fit ($\chi^2 = 354.95$, $df = 180$, $p = .00$, CFI = .92, RMSEA = .05). Therefore, the unconstrained model is

reported here (see Figure 1 and Table 9). In the first cohort, the total amount of explained variance in RS of women was 58.0% and in RS of men 59.6%. In the second cohort, the total amount of explained variance was 52.6% for women and 57.2% for men, and in the third cohort 67.1% and 66.8%, respectively.

Overall, the associations between PEI and RS, between PC and RS, and between PDC and RS were positive; only few of them were negative, with regression weights around zero (except for the effect of men's PC on men's RS in the third cohort, see below). The associations between NC and RS and between NDC and RS were overall negative; only few of them were positive, having regression weights around zero.

In the youngest couples, significant actor effects (that is effects within one partner: e.g., the effect of PEI women on RS women) were found between NC and RS and between PEI and RS, for both men and women. Furthermore, men's report of PDC had a significant actor and partner effect on RS, and men's NC had a significant partner effect on women's RS. In the middle-aged couples, significant actor effects were found between NC and RS for both partners. Interestingly, for PEI, only partner effects – but not actor effects – were significant for both men and women. Additionally, there were significant actor effects for women's PDC and men's NDC on RS. In the oldest couples, there were significant actor effects for NC, PEI, and PDC for both men and women. Furthermore, men's PC had a significant actor effect, which was unexpectedly negative, and men's NC had a significant partner effect on RS. The negative effect of men's PC was due to a suppressor effect, since in an APIM calculated with PC only, the regression coefficient was .16 ($p < .001$).

To examine the relevance of the different predictors in the three age groups, the amount of variance explained by each predictor was first considered. That is, separate APIMs were calculated for each predictor in each cohort. In the first cohort, the highest amount of variance in men's relationship satisfaction was explained by PDC (39.8%), followed by PEI

(35.8%), NC (35.4%), NDC (31.4%), and PC (18.5%). The highest amount of variance in women's relationship satisfaction was explained by PEI (40.9%), followed by PDC (37.8%), NC (32.9%), NDC (31.3%), and PC (17.6%). In the second cohort, the highest amount of variance in men's relationship satisfaction was explained by NC (39.4%), followed by NDC (39.0%), PEI (34.3%), PDC (22.6%), and PC (14.2%). The highest amount of variance in women's relationship satisfaction was explained by PDC (34.4%), followed by NC (34.3%), NDC (32.9%), PEI (31.6%), and PC (25.2%). In the third cohort, the highest amount of variance in men's and women's relationship satisfaction was explained by PDC (47.5% and 53.2%, respectively), followed by NC (45.2%, 48.2%), PEI (37.4%, 47.6%), NDC (32.7%, 40.4%), and PC (25.4%, 40.3%). In sum, positive dyadic coping of the partner was of high relevance for relationship satisfaction in all cohorts, while positive conflict communication explained the least of the variance in all cohorts and across genders.

Second, to identify the unique contribution in terms of variance explanation of the three distinct communication forms, restricted APIMs were calculated. All model parameters were fixed to the parameter estimates found in the unconstrained model reported above except for the communication form of interest, its regression weights were set to zero. If this model does not fit to the data, the communication form of interest explains additional variation in relationship satisfaction. The results showed that in the first cohort, none of the communication forms uniquely explained variance in relationship satisfaction. In the second cohort, the restricted APIM for PEI did not fit to the data ($\chi^2 = 35.77$, $df = 20$, $p = .02$) which comes along with a difference in determination coefficients of 9.4% in men's and 7.3% in women's RS from the constrained to the unconstrained model. In the third cohort, there was a considerable change in determination coefficients associated to NC and PEI. The constrained models did not yield a good fit ($\chi^2 = 31.73$, $df = 20$, $p = .05$ and $\chi^2 = 35.54$, $df = 20$, $p = .02$, respectively). For NC, the increase in explained variance in men's RS was 7.1% and 3.8% in women's RS; for PEI, the explained variances increased by 7.4% and 6.6%, for men and

women respectively. To sum up, only positive everyday interaction of the partner (in the second and third cohort) and negative conflict communication (in the third cohort) explained additional variance beyond the other predictors, that is, unique variance that cannot be explained by the others or the interplay of all predictors.

Furthermore, we tested in an exploratory approach whether there are any interaction effects. First, interaction effects between PEI and conflict communication (PC and NC) were examined (see Table 10, Model A). The APIM included PEI, PC, NC, and the interaction terms between PEI and PC and between PEI and NC. In the second and the third cohort, the interaction term between women's PEI and women's NC on men's RS was significant. Thus, in the second cohort, high levels of women's PEI buffer the adverse effects of women's NC on men's RS; in the third cohort, high levels of women's PEI only have an effect on men's RS when women's report of NC is low. In the third cohort, the interaction term between men's PEI and men's NC on men's RS, the interaction between women's PEI and women's PC on men's RS, and the interaction between men's PEI and men's PC on women's RS were significant. Thus, high levels of men's PEI mitigate the adverse effects of men's NC on men's RS. Additionally, high levels of women's PEI compensate in men's RS for low levels of women's PC, and high levels of men's PEI compensate in women's RS for low levels of men's PC.

Second, interaction effects between PEI and dyadic coping (PDC and NDC) were tested (see Table 10, Model B). The APIM included PEI, PDC, NDC, and the two interaction terms (PEI \times PDC and PEI \times NDC). In the first and third cohort, the interaction term between men's PEI and men's PDC on women's RS was significant, indicating that high levels of men's PEI compensate for low levels of men's PDC. In the second cohort, the interaction term between women's PEI and women's NDC on women's RS and the interaction term between men's PEI and men's NDC on women's RS were significant, indicating a buffering

effect. In the second and in the third cohort, the interaction term between women's PEI and women's PDC on women's RS was significant, indicating that high levels of women's PEI compensate for low levels of women's PDC. In the third cohort, the interaction term between men's PEI and men's PDC on men's RS was significant, indicating that high levels of men's PEI compensate for low levels of men's PDC.

Third, interaction effects between PDC and conflict communication (PC and NC) were examined (see Table 10, Model C). The APIM included PDC, PC, NC, and the two interaction terms (PDCxPC and PDCxNC). A model with all regression weights constrained to be equal across groups did yield a good fit ($\chi^2 = 45.60$, $df = 40$, $p = .25$, CFI = 1.00, RMSEA = .02). In all cohorts, the interaction term between men's PDC and men's NC on men's RS was significant, demonstrating that high levels of men's PDC buffer the adverse effects of men's NC.

In sum, all three tests of potential interaction effects among the different forms of communication show that positive forms of interaction have the potential to mitigate negativity or compensate for low positivity, especially in couples of the second and third cohort.

Discussion

The aim of this study was to determine the associations between different forms of communication and relationship satisfaction in three age groups and the specific relevance of each of the predictors for relationship satisfaction. The predictors were positive everyday interaction, positive and negative conflict communication, and positive and negative dyadic coping. Our findings provide evidence for different associations among the predictor variables and relationship satisfaction (RS) in the three age groups, indicating that forms of communication do not play the same role in young, middle-aged or older couples. Firstly,

whereas positive everyday interaction of the partner (PEI) had significant actor effects in the first and third cohort for both partners, it had significant partner effects in the second cohort for both partners. Hence, it is important for the middle-aged partners to behave positively in everyday life or to be perceived in that way, and not to perceive their own partner's behavior as rewarding. Secondly, positive conflict communication of the partner (PC) had no significant associations with RS (except for men's actor effect in the third cohort). Thirdly, while negative conflict communication of the partner (NC) was detrimental for the partner's own RS in all cohorts across genders, partner effects of NC, namely from men's NC on women's RS, were found only in the first and third cohort. Thus, in these cohorts, women are less satisfied in their relationship to the extent that men appraise women's interaction during conflict as negative. Fourthly, positive dyadic coping of the partner (PDC) had significant actor effects for men in the first cohort, for women in the second cohort, and for both partners in the third cohort. Fifthly, the only significant association for negative dyadic coping of the partner (NDC) was between men's NDC and men's RS in the second cohort, which implies that middle-aged men are especially sensitive to negative forms of support (see also Papp & Witt, 2010).

The predictor explaining most of the variance in women's RS in analyses with only one construct as predictor in the APIMs in the first cohort was PEI and in men's RS it was PDC. In the second cohort, the predictor explaining most of the variance in women's RS was PDC and in men's RS NC. In the third cohort, the most important predictor was PDC for both men and women. Surprisingly, in this cohort, the order of the variables considering the amount of explained variance was exactly the same for both partners. Above and beyond the other predictors, it was PEI (second and third cohort) and NC (third cohort) which explained variance in RS. This finding highlights the significance of positive behaviors partners display in everyday life, especially in the absence of conflicts or support providing interactions.

According to our expectations, PEI, NC, PDC, and NDC were relevant for relationship satisfaction in all age groups. Nevertheless, contrary to our assumption, PC was not particularly relevant for RS. Although all correlations between PC and RS were significant in all age groups across genders, PC explained the least variance in both partners' RS across all age groups. Thus, positivity in the conflict context is of minor importance, possibly due to the greater salience and impact of NC during a conflict. The first hypothesis, that in the second cohort dyadic coping would be a stronger predictor of RS than conflict communication and PEI, was partially confirmed. When the predictors were considered separately, PDC explained the highest amount of variance in women's RS. For men, NDC explained more variance in RS than PEI, but a little less than NC. Thus, in the second cohort, PDC is highly relevant for women's RS and NDC is highly relevant for men's RS, perhaps owing to increased family and work demands in middle age compared to young adulthood and old age. Middle-aged couples may be especially exposed to stress, which in turn requires functioning coping mechanisms. When all predictors were considered, however, dyadic coping did not explain variance beyond the other predictors; only PEI did so.

The second hypothesis, that positive forms of interaction would be of higher relevance in the first and third cohort compared to the second, was not confirmed. In the second cohort, PEI was the predictor that explained additional variance beyond the other predictors, even though when considered separately, it was NC that explained most of the variance in men's RS. This suggests that positivity in a couple's everyday life is essential for couples of all age groups, and its relevance is not diminished among middle-aged or older couples. PEI depicts everyday and frequent interactions between partners – as opposed to conflict or dyadic coping interactions – and this explains its relevance reported here. For example, Bradbury, Rogge, and Lawrence (2001) point out that conflicts are not that frequent and, furthermore, that couples get married because of all the positive aspects of their relationship, and so it might be

the erosion of these, and not the lack of problem-solving competencies, that leads to dissatisfaction.

The third hypothesis, that couples in the third cohort would rate their conflict interactions as more positive than couples in the first and second cohort, was not confirmed. For men, there were no significant differences between cohorts. Contrary to our expectation, however, PC was rated significantly lower by women in the third cohort compared to women in the first. This result contradicts the findings reported by Levenson et al. (1994), which might be due to methodological issues, as they used observational data. Another reason might be that Levenson and colleagues compared middle-aged to older couples in long-term marriages, but not young couples aged 20 to 35 (our first cohort). Furthermore, young couples in our study had an average relationship length of 4.7 years, which might imply that conflicts are not yet that often or substantial as in long-term relationships.

The fourth hypothesis, that women would rate PEI higher than men do, was confirmed for the young couples, but not for the middle-aged and older couples. In the first cohort, PEI was rated significantly higher by women than by men, indicating that either women are more aware of PEI in their relationship, or men in the first cohort are more attentive and positive in their everyday interactions compared to women. We were not able to replicate the findings by Doohan and Manusov (2004) in our second and third cohort, possibly due to the fact that they did not compare different age groups and the mean age of their participants was 19.9 years.

Taken together, these findings provide insight into the differences between age groups and the importance of various aspects of communication for a couple's functioning. Furthermore, our additional analyses of possible interaction effects revealed that positive everyday interaction has buffering as well as compensating effects on the association between conflict communication and relationship satisfaction, and dyadic coping and satisfaction. For men only, there was also a buffering effect of positive dyadic coping when negative

communication was high. Our findings emphasize the importance of positive exchanges in couples' everyday lives when they encounter problems in conflict communication or dyadic coping, especially for middle-aged and older couples.

There are some limitations of this study that restrict the extent to which the results can be generalized: i) most of the participating couples had a high level of education, ii) the relationship satisfaction of the couples in all age groups was rather high, and iii) all variables were assessed via self-report and are thus prone to biases.

Nevertheless, this study has some important implications. First, positive everyday interaction and positive dyadic coping are crucial for relationship satisfaction – not only in the beginning of a relationship for a young couple, but also later on. Positive conflict communication, on the other hand, does not seem to have a great impact on relationship satisfaction. Thus, besides focusing on problem-solving skills in prevention programs and in couple therapy, it is important to address the couple's everyday interactions in order to enhance their positivity in everyday life. For middle-aged couples, an additional emphasis should be laid on dyadic coping competencies, as women are especially sensitive to PDC and men to NDC. Second, only in the second cohort did perceived positivity of the partner in everyday life not matter for the participants' own relationship satisfaction, but instead how positively they themselves were perceived by their partner—or, stated differently, how positively they actually behaved themselves. So the more attentive and interested they were perceived to be, the happier they were themselves in their relationship. In prevention programs and in therapy, couples should be advised that in being attentive and positive toward their partners, they can improve their own relationship satisfaction. Third, how couples communicate during conflicts is one source of variance in relationship satisfaction, but perhaps not the most important one. Thus, further research should integrate other forms of couple interaction rather than focus on conflict communication alone. For example, more

research is needed to examine positive communication in positive interaction tasks (see e.g., Graber et al., 2011). Additionally, observational and longitudinal data of couples at different ages would lead to further understanding of age differences and developmental changes in communication.

Table 7

Demographic Variables in Percentage Terms

Variables	1 st Cohort (<i>n</i> = 122 couples)	2 nd Cohort (<i>n</i> = 125 couples)	3 rd Cohort (<i>n</i> = 121 couples)
Married	25%	82%	90%
Living together with partner	56%	88%	93%
Having children	20%	86%	89%
College or university degree (w / m)	45% / 43 %	32% / 58%	17% / 46%
Living in the city (w / m)	54% / 57%	28% / 38%	71% / 69%

Note. *N* = 368 couples; w / m = women / men.

Table 8

Intercorrelations, Means, and Standard Deviations for Positive Everyday Interaction, Conflict Communication, Dyadic Coping, and Relationship Satisfaction and Length in the Three Cohorts

Measure	1	2	3	4	5	6	7	M	SD
1 st Cohort (<i>n</i> = 122 couples)									
1. PC	-	-.42**	.46**	.48**	-.36**	.36**	-.13	3.98	0.93
2. NC	-.33**	-	-.29**	-.28**	.61**	-.50**	-.00	2.20	0.68
3. PEI	.45**	-.34**	-	.59**	-.48**	.62**	-.21*	4.30	0.72
4. PDC	.40**	-.39**	.50**	-	-.53**	.50**	-.08	3.69	0.66
5. NDC	-.32**	.40**	-.38**	-.38**	-	-.53**	.10	1.72	0.69
6. RS	.28**	-.59**	.51**	.58**	-.47**	-	.03	4.36	0.48
7. RL	-.13	.08	-.30**	-.06	.01	.02	-	4.67	3.50
<i>M</i>	4.14	2.06	4.15	3.62	1.50	4.32	4.67		
<i>SD</i>	0.80	0.67	0.74	0.56	0.51	0.48	3.50		
2 nd Cohort (<i>n</i> = 125 couples)									
1. PC	-	-.54**	.47**	.66**	-.45**	.45**	.00	3.74	0.98
2. NC	-.52**	-	-.33**	-.47**	.63**	-.55**	.13	2.25	0.70
3. PEI	.42**	-.38**	-	.57**	-.53**	.50**	-.25**	3.73	0.83
4. PDC	.48**	-.48**	.47**	-	-.67**	.56**	-.12	3.53	0.72
5. NDC	-.38**	.59**	-.39**	-.49**	-	-.53**	.14	1.79	0.73
6. RS	.30**	-.60**	.48**	.41**	-.55**	-	.01	4.32	0.48
7. RL	-.11	.08	-.21*	.07	.06	-.04	-	18.36	9.69
<i>M</i>	4.18	2.02	3.83	3.57	1.65	4.35	18.36		
<i>SD</i>	0.77	0.65	0.69	0.57	0.62	0.46	9.69		
3 rd Cohort (<i>n</i> = 121 couples)									
1. PC	-	-.57**	.60**	.70**	-.51**	.60**	.04	3.62	0.94
2. NC	-.49**	-	-.43**	-.60**	.65**	-.62**	.01	2.06	0.65
3. PEI	.60**	-.38**	-	.62**	-.51**	.66**	.00	3.89	0.84
4. PDC	.51**	-.50**	.49**	-	-.62**	.68**	-.02	3.54	0.76
5. NDC	-.45**	.63**	-.38**	-.53**	-	-.55**	.06	2.17	0.84

6. RS	.40**	-.65**	.54**	.64**	-.57**	-	.07	4.31	0.55
7. RL	-.12	-.04	-.06	.05	.09	.11	-	42.88	12.49
<i>M</i>	4.11	1.87	4.03	3.69	1.69	4.45	42.88		
<i>SD</i>	0.93	0.63	0.73	0.71	0.65	0.52	12.49		

Note. Intercorrelations for women are presented above the diagonal, and intercorrelations for men are presented below the diagonal. Means and standard deviations for women are presented in the vertical columns, and means and standard deviations for men are presented in the horizontal rows. PC = positive communication partner; NC = negative communication partner; PEI = positive everyday interaction partner; PDC = positive dyadic coping partner; NDC = negative dyadic coping partner; RS = relationship satisfaction; RL = relationship length.

* $p < .05$, ** $p < .01$.

Table 9

Unstandardized Estimates, Standardized Estimates, and Significance Levels for Model in Figure 1 (Standard Errors in Parentheses; N = 368)

Parameter Estimate	Cohort 1 (n = 122)			Cohort 2 (n = 125)			Cohort 3 (n = 121)		
	Unstandardized	Standardized	<i>p</i>	Unstandardized	Standardized	<i>p</i>	Unstandardized	Standardized	<i>p</i>
Actor Effects									
PC women → RS women	-.03 (.04)	-.05	.54	.01 (.05)	.01	.92	.01 (.05)	.01	.87
NC women → RS women	-.13 (.06)	-.18	< .05	-.19 (.06)	-.28	< .01	-.14 (.07)	-.16	< .05
PEI women → RS women	.25 (.06)	.37	< .001	.05 (.05)	.08	.34	.21 (.05)	.32	< .001
PDC women → RS women	.10 (.06)	.14	.09	.21 (.07)	.31	< .01	.13 (.06)	.18	< .05
NDC women → RS women	-.05 (.06)	-.08	.38	.01 (.07)	.01	.94	-.02 (.05)	-.03	.71
PC men → RS men	-.03 (.04)	-.06	.44	-.08 (.04)	-.14	.07	-.11 (.04)	-.19	< .05
NC men → RS men	-.26 (.06)	-.36	< .001	-.25 (.06)	-.35	< .001	-.33 (.07)	-.40	< .001
PEI men → RS men	.12 (.05)	.19	< .05	.07 (.05)	.11	.15	.21 (.05)	.30	< .001
PDC men → RS men	.21 (.06)	.25	< .001	.01 (.06)	.02	.83	.21 (.05)	.29	< .001
NDC men → RS men	-.12 (.07)	-.12	.08	-.18 (.06)	-.24	< .01	-.11 (.06)	-.14	.06
Partner Effects									
PC women → RS men	.06 (.04)	.11	.14	-.00 (.04)	-.01	.94	.04 (.05)	.06	.46
NC women → RS men	.08 (.06)	.11	.21	-.04 (.06)	-.07	.43	.11 (.07)	.14	.08
PEI women → RS men	.07 (.06)	.10	.25	.19 (.05)	.34	< .001	.08 (.05)	.13	.09

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PDC women → RS men	.03 (.06)	.04	.64	-.09 (.06)	-.14	.17	.06 (.06)	.09	.33
NDC women → RS men	-.07 (.06)	-.10	.24	-.07 (.06)	-.11	.25	.07 (.05)	.11	.13
PC men → RS women	.03 (.04)	.04	.56	-.02 (.05)	-.03	.67	-.01 (.04)	-.02	.76
NC men → RS women	-.13 (.06)	-.18	< .05	-.05 (.07)	-.07	.44	-.17 (.07)	-.20	< .05
PEI men → RS women	-.01 (.05)	-.02	.82	.20 (.06)	.29	< .001	.05 (.06)	.07	.35
PDC men → RS women	.13 (.06)	.15	< .05	-.02 (.07)	-.02	.82	.09 (.06)	.11	.12
NDC men → RS women	-.01 (.07)	-.01	.90	-.02 (.06)	-.03	.76	-.04 (.06)	-.04	.56

Note. $\chi^2 = .00$, $df = 0$, CFI = 1.00. PC = positive communication partner; NC = negative communication partner; PEI = positive everyday interaction partner; PDC = positive dyadic coping partner; NDC = negative dyadic coping partner; RS = relationship satisfaction.

Table 10

Unstandardized Estimates, Standardized Estimates, and Significance Levels for Interaction Terms (Standard Errors in Parentheses; N = 368)

Parameter Estimate	Cohort 1 (n = 122)			Cohort 2 (n = 125)			Cohort 3 (n = 121)		
	Unstandardized	Standardized	<i>p</i>	Unstandardized	Standardized	<i>p</i>	Unstandardized	Standardized	<i>p</i>
Model A: Actor Effects									
MPEIxMNC → RS men							.34 (.09)	.32	< .001
Model A: Partner Effects									
FPEIxFPC → RS men							-.11 (.05)	-.17	< .05
FPEIxFNC → RS men				.14 (.05)	.22	< .01	-.16 (.07)	-.18	< .05
MPEIxMPC → RS women							-.11 (.05)	-.14	< .05
Model A: Change in R^2 w / m		.04 / .02			.03 / .05			.08 / .07	
Model B: Actor Effects									
FPEIxFPDC → RS women				-.20 (.06)	-.29	< .01	-.21 (.07)	-.24	< .01
FPEIxFNDC → RS women				-.12 (.06)	-.20	< .05			
MPEIxMPDC → RS men							-.13 (.06)	-.15	< .05
Model B: Partner Effects									
MPEIxMPDC → RS women	-.20 (.07)	-.20	< .01				-.13 (.06)	-.14	< .05
MPEIxMNDC → RSwomen				.17 (.08)	.16	< .05			
Model B: Change in R^2 w / m		.05 / .01			.06 / .05			.08 / .06	

Model C: Actor Effects

MPDCxMNC → RS men	.11 (.04)	.12	< .05	.11 (.04)	.11	< .05	.11 (.04)	.15	< .05
Model C: Change in R^2 w / m		.01 / .01			.01 / .01			.02 / .01	

Note. Only significant interaction effects are reported. Model A: $\chi^2 = .00$, $df = 0$, CFI = 1.00; Model B: $\chi^2 = .00$, $df = 0$, CFI = 1.00; Model C: $\chi^2 = 45.60$, $df = 40$, CFI = 1.00, RMSEA = .02. F = women's evaluation of the partner; M = men's evaluation of the partner. PC = positive communication partner; NC = negative communication partner; PEI = positive everyday interaction partner; PDC = positive dyadic coping partner; NDC = negative dyadic coping partner; RS = relationship satisfaction; change in R^2 w / m = change in R^2 for women / men when the interaction terms are entered into the model.

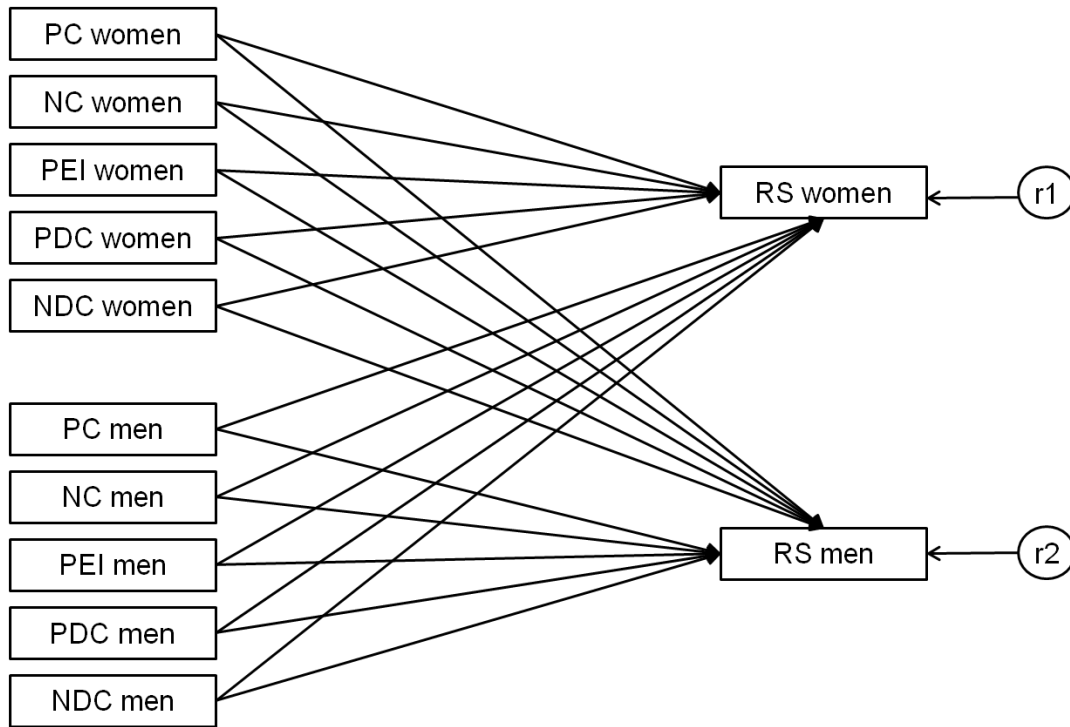


Figure 1. Actor-Partner Interdependence Model with relationship satisfaction as outcome. For reasons of simplicity, all covariances are omitted; all predictors are allowed to covary as are the two residual variables. PC = positive communication partner; NC = negative communication partner; PEI = positive everyday interaction partner; PDC = positive dyadic coping partner; NDC = negative dyadic coping partner; RS = relationship satisfaction.

8. Study III: The Moderating Effect of Couples' Positivity on Negative Conflict Communication in Three Age Groups³

Abstract

This study investigated the buffering effect of positive everyday interaction and positive dyadic coping on the association between observed negative conflict communication and relationship satisfaction. Participants were 227 heterosexual couples in three age groups – 84 young, 69 middle-aged, and 74 older couples – who filled in questionnaires on positive and supportive behaviors and relationship satisfaction, and engaged in a videotaped conflict discussion. The results demonstrate that positive everyday interaction and positive dyadic coping are able to buffer the adverse effects of observed negative conflict communication on women's relationship satisfaction, and that this holds true for couples of all age groups. Furthermore, positive and supportive behaviors were associated with both partner's relationship satisfaction. The findings highlight the importance of positivity in young, middle-aged, and older couples and the relevance to consider the context in which negativity occurs. Moreover, they indicate that there is a stronger relative buffering effect for positive dyadic coping than for positive everyday interaction.

Introduction

Conflict communication has been widely studied in the research of intimate relationships, and its relevance for relationship outcome is well documented (e.g., Clements, Stanley, & Markman, 2004; Gottman, 1994; Karney & Bradbury, 1995). So far, however, less attention has been paid to positive forms of interaction and their potential to buffer the adverse effects of negative communication, although some studies started to address this topic in general (e.g., Bradbury & Karney, 2004; Driver & Gottman, 2004; Fincham, Stanley, &

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Beach, 2007). Furthermore, still little is known about age-specific associations between communication and relationship satisfaction and how this association may be moderated in different age groups. Accordingly, the major purpose of the present study was to investigate the moderating effects of positive everyday interaction and positive dyadic coping, as two different forms of positivity, on the association between observed negative conflict communication and relationship satisfaction in three age groups, namely young, middle-aged, and older couples.

Conflict communication

The way couples communicate with each other during a conflict has been linked to mental health (e.g., Sandberg et al., 2013), physical health (e.g., Kiecolt-Glaser et al., 2005), and relationship satisfaction and stability (e.g., Clements et al., 2004). For the stability of a relationship, it seems to be more important how couples argue than what they argue about (Stanley et al., 2002). Particularly harmful forms of interaction for relationship outcome are criticism, defensiveness, contempt, withdrawal, emotional invalidation, and the demand-withdraw interaction pattern (Baucom, McFarland, & Christensen, 2010; Clements et al., 2004; Gottman, Coan, Carrere, & Swanson, 1998). In a meta-analysis by Woodin (2011), negative conflict behaviors (hostility, distress, and withdrawal) were inversely associated with relationship satisfaction. Observed conflict communication discriminated between married-satisfied and married-dissatisfied couples five years after marriage and predicted rates of change in marital satisfaction over four years (Karney & Bradbury, 1997; Rogge et al., 2006). Additionally, observed negative communication before marriage was related to lower marital satisfaction across the first five years of marriage (Markman et al., 2010).

Positivity in everyday life

In contrast to conflict communication, research focusing on positive forms of interaction, i.e. how couples treat each other in everyday life in non-conflict situations (e.g., compliments, expressing love, being attentive), has been less prominent. Studies on positivity have investigated the exchange of compliments (e.g., Doohan & Manusov, 2004), emotional behavior in discussions of positive feelings for each other (e.g., Graber, Laurenceau, Miga, Chango, & Coan, 2011), gratitude (e.g., Algoe, Gable, & Maisel, 2010), or physical affection (e.g., Debrot, Schoebi, Perrez, & Horn, 2013). The results of these studies emphasize the relevance of positive interactions for couples' well-being. Findings by (Janicki et al., 2006) support this notion. They showed that only agreeable spousal interactions independently predicted marital adjustment when average diary ratings of agreeableness and conflict during interactions were analyzed simultaneously. Furthermore, there is evidence that positivity is able to mitigate the adverse effects of negativity on relationship outcome. For example, the negative impact of the demand-withdraw pattern may be buffered if one partner expresses high levels of affection in daily life (Caughlin & Huston, 2002). Similarly, the adverse effects of husbands' negative behaviors on wives' satisfaction can be buffered if husbands are highly affectionate or accommodating (Huston & Chorost, 1994), and the detrimental impact of negative problem-solving skills may be weakened if spouses also express high levels of positive affect (Johnson et al., 2005). To conclude, positive interaction behaviors are essential for relationship functioning and have the potential to attenuate the adverse effects of negative behavior.

Positive dyadic coping

Dyadic coping is conceptualized as a stress management process within a couple that involves both partners, and includes the stress communication of one partner and the reaction with positive or negative dyadic coping of the other partner (Bodenmann, 2005). Positive

forms of dyadic coping are supportive dyadic coping, common dyadic coping, and delegated dyadic coping. Supportive dyadic coping, for example, conveys solidarity with the partner and help him/her to reframe the situation. Common dyadic coping means joint problem-solving with stress relevant to the dyad, and in delegated dyadic coping, one partner explicitly asks the other to give support. On the other hand, hostile dyadic coping (support that is given in a negative way, e.g., support accompanied by sarcasm), ambivalent dyadic coping (support given unwillingly), and superficial dyadic coping (insincere support without empathy) all describe negative forms of dyadic coping (Bodenmann, 2005). The association between dyadic coping and relationship satisfaction is well established (e.g., Bodenmann, Pihet, & Kayser, 2006; Herzberg, 2013; Papp & Witt, 2010). There is also evidence for a moderating effect of spousal support with respect to marital satisfaction (Brock & Lawrence, 2008; Pasch & Bradbury, 1998). Thus, the way partners deal with their stress in a supportive and understanding manner is another important aspect for relationship functioning.

Age differences

According to Li and Fung (2011), the priorities of marital goals change across adulthood. More specifically, young couples emphasize personal growth goals, middle-aged couples emphasize instrumental goals, and older couples prioritize companionship goals. Additionally, the authors suggest that the prioritized marital goals are associated with communication patterns. Findings by Ebner, Freund, and Baltes (2006) provide evidence that younger adults' goals are mainly oriented toward growth, whereas older adults' goals are more strongly oriented toward maintenance and prevention of losses. Studies on age differences in communication usually compare middle-aged and older couples, but do not include young couples as well. Consistent with the socioemotional selectivity theory (Carstensen, 1993), findings by Carstensen, Gottman, and Levenson (1995) and Levenson, Carstensen, and Gottman (1994) indicate that older couples express less negativity and more

positivity in interactions compared to middle-aged couples. It has also been shown that the partner's behavior is perceived as more positive and less negative in older couples than in middle-aged couples (Henry et al., 2007; Story et al., 2007), and that interpersonal tensions – which were reported less often by older individuals compared to younger – were less likely to cause arguments in older individuals (Birditt et al., 2005). Blanchard-Fields, Mienaltowski, and Seay (2007) reported that older adults were more effective in solving interpersonal problems and that they chose more avoidant-denial strategies than young adults. Furthermore, Luong and Charles (2014) found that older adults responded with less affective and cardiovascular reactivity to a conflict discussion and appraised the discussion as more positive than younger adults. Concerning dyadic coping, positive dyadic coping seems to be less frequent in older couples compared to younger couples (Bodenmann & Widmer, 2000). Taken together, there is some evidence that communication behaviors are not the same in couples of different age groups, which emphasizes the importance to further investigate young, middle-aged, and older couples.

Hypotheses

This study examines the moderating effect of positive everyday interaction and positive dyadic coping on the association between observed negative conflict communication and relationship satisfaction in young, middle-aged, and older couples. Based on the findings reported above, we hypothesized that i) observed negative conflict communication would be negatively associated with relationship satisfaction, ii) positive everyday interaction would buffer the adverse effects of negative conflict communication on relationship satisfaction, and similarly that iii) positive dyadic coping would buffer the adverse effects of negative conflict communication on relationship satisfaction. Furthermore, we hypothesized that iv) older couples would show less buffering by positive everyday interaction and positive dyadic coping compared to younger couples. This hypothesis is based on the findings reported above

which suggest that older couples appraise conflict situations as more positive, show less reactivity to conflict discussions (Luong & Charles, 2014), and are less negative in their conflict discussion (e.g., Carstensen et al., 1995). Furthermore, findings indicate that positive dyadic coping is less frequent in older couples (Bodenmann & Widmer, 2000), which might render it less likely to have a buffering effect.

Method

Sample

Recruitment was conducted in Switzerland through print media, radio, (online) advertising, and address draw (concerning the older couples). Conditions of participation were as follows: i) the relationship lasted at least one year, ii) German was the main language of communication in the couple, and iii) the age of one partner had to meet the age requirement of one of the three age groups, while the other partner's age could deviate from this requirement by no more than two years. The initial sample size consisted of 368 heterosexual couples. We did not have video data of three couples (in one couple due to technical problems, in two couples due to their lacking consent to be filmed/to use their video data), which reduced our sample to 365 couples. Inclusion criterion for the present study was that negative conflict communication had to be present in order that the moderation hypotheses are meaningful. Thus, we conducted a median split and included all couples where both partners, or at least one partner, had values higher than the median (*Mdn* women = .06, range = .00 - .77; *Mdn* men = .04, range = .00 - .83). This resulted in a sample size of 227 couples for our analyses. The young couples ($n = 84$) were between 20 and 35 years old, the middle-aged couples ($n = 69$) between 40 and 55 years, and the older couples ($n = 74$) were between 65 and 80 years old. For the young couples, the mean relationship length was 4.9 years ($SD = 3.7$; range = 1-17), for the middle-aged couples it was 19.7 years ($SD = 9.1$; range = 1-38), and for the older couples it was 44.6 years ($SD = 10.0$; range = 10-60). The sample's

characteristics in terms of social demographic variables, such as income or education (see Table 11), are representative of the Swiss lower to upper middle class.

Data Collection

The procedure of data collection consisted of two parts. The couples were first sent questionnaires which they completed at home. They were instructed to complete the questionnaires individually and independently from each other. Second, the couples came to the laboratory and both partners completed a more comprehensive set of questionnaires (including the questionnaires used in this study) and then conducted three interaction tasks. One of them was the conflict discussion referred to in this study, in which the couple was instructed to discuss a topic that often led to conflicts in their relationship. Prompted by a list of typical conflict topics within romantic relationships (such as, e.g., finances, communication, intimacy, religion/values, recreational time, friends, and jealousy) and unobtrusively moderated by the examiner, the couple chose a specifically relevant subject for their following conflict discussion. Then they were left alone and had eight minutes for the discussion, which was videotaped. After this videotaped interaction sequence, the couple was again separated to complete another set of questionnaires and finally received a debriefing as well as 100 Swiss francs (approximately 110 US \$).

Measures

Observed negative conflict communication (NC). The videos of the conflict discussions were coded using an adapted version of the Specific Affect Coding System (SPAFF; Gottman, 1994). Two coders, who had first completed training and a trial phase with coaching (in total more than 60 hours), coded the conflict discussions – one observing the female and the other the male partner. The eight minute videotaped interaction sequence was split into 48 intervals of ten seconds length each. For all ten second intervals, positive (not

used in this study), negative, or neutral communication behavior was coded. The negative behavior was coded as (listed in order of increasing intensity): criticism, defensiveness, domineering, stonewalling, formal negative interaction (interruptions), contempt, or belligerence. For each 10 second interval, one (the strongest) form of communication behavior was coded. For the analyses, relative frequencies were computed, i.e., sum scores were calculated by summing the number of intervals in which the person expressed negativity, and this sum was then divided by the number of intervals with coded behaviors. Intervals were not coded if, for example, the spoken content could not be understood or the behavior did not fit into the predefined categories. Interrater reliability between the two coders was $\kappa = .90$ for the training phase.

Positive everyday interaction (PEI). The PEI-scale (Ruffieux & Bodenmann, 2011) assesses the frequency of positive behavior in everyday life of oneself and one's partner and is conceptualized to depict everyday interactions that reinforce and maintain positivity in the relationship. It consists of nine items rated on a 6-point scale (1 = *never*, 6 = *always*); item examples are "I pay my partner compliments", "Every now and then, I bring along presents for my partner", and "I show my partner that I love him/her". The partner evaluations were used in the analyses (i.e., how participants rate the behavior of their partner). Cronbach's alphas were .91 for women and .88 for men.

Positive dyadic coping (PDC). The Dyadic Coping Inventory (DCI; Bodenmann, 2008) consists of 37 items rated on a 5-point scale (1 = *very rarely*, 5 = *very often*) and assesses the frequency of stress communication as well as positive, negative, and joint dyadic coping as shown by oneself and one's partner. In the analyses, only partner evaluations of positive dyadic coping were used (item example: "He/She makes me feel like he/she is understanding me and that my stress is of interest to him/her"). We excluded the subscales of stress communication, negative dyadic coping, common dyadic coping, and the evaluation of

dyadic coping in order to have a comparable measure to PEI, (i.e., with PEI and PDC, one's rating of the partner's positive behavior is assessed). The psychometric quality of the DCI is good (Bodenmann, 2008), and Cronbach's alphas were .82 for women and .83 for men in our study.

Relationship satisfaction (RS). RS was assessed with the Relationship Assessment Scale (RAS; Hendrick, 1988), a 5-point scale with seven items (e.g., "How well does your partner meet your needs?"). Cronbach's alphas were .86 for women and .87 for men.

Data Analysis

In the data analysis, we used the above described observational data (NC) and questionnaire data (PEI, PDC, and RS). PEI and PDC refer to partner evaluations (e.g., PEI women is women's rating of their partner; PEI men is men's rating of their partner). To test the moderation hypotheses, we ran Actor-Partner-Interdependence Models (APIMs; Cook & Kenny, 2005) with moderation (Ledermann & Bodenmann, 2006) in Amos 20 (Arbuckle, 2011) using the multigroup-option to examine possible differences between age groups. In the APIMs, actor effects are effects within one partner, for example, the effect of PEI women on RS women, and partner effects are effects across partners, for example, the effect of PEI women on RS men. Furthermore, MANOVAs were conducted to test mean differences between the three age groups.

Results

Descriptives and Mean Comparisons Results

Correlations, means, and standard deviations of all study variables, for men and women in the three age groups, are presented in Table 12. Overall, couples rated PEI and PDC as occurring in moderate frequency, and they also reported being in rather satisfying relationships. All bivariate correlations between PEI and RS and between PDC and RS were

positive, and all correlations between NC and RS were negative. For young couples, the strongest correlations were found between PEI women and women's RS and between PDC men and men's RS. For middle-aged couples, the strongest correlations were obtained between PEI women and PDC women, and between PEI men and men's RS as well as between PEI men and PDC men. For older couples, strongest correlations were found between PDC and RS, for both partners.

Concerning mean differences, we found that, for women, PEI was highest in young couples ($p < .001$; MANOVA); the other two groups did not differ. For men, there was significantly less NC in middle-aged couples compared to older couples ($p < .05$; the other groups did not differ) and PEI was lowest rated in middle-aged couples ($p < .01$; the other groups did not differ).

Actor-Partner-Interdependence Moderation Models

Positive everyday interaction as moderator. Results of the multiple-group procedure indicated that a model with all regression weights constrained to be equal across groups did yield an acceptable fit ($\chi^2 = 39.97$, $df = 24$, $p = .02$, CFI = .96, RMSEA = .05). The restricted model fit was the most parsimonious model that fit well to the data as compared to more restrictive models (e.g., additionally restricting variances to be equal across groups). This model is depicted in Figure 2 and the corresponding estimates are reported in Table 13. In the young couples, the total amount of explained variance in women's RS was 55.5% and in men's RS 40.9%. In the middle-aged couples, 40.0% of the variance was explained in women's RS and 34.3% in men's RS, and in the oldest couples 48.4% and 43.8 %, respectively. All associations between PEI and RS were positive, and all associations between NC and RS were negative, except for the insignificant effect between NC women and RS men.

Significant actor and partner effects were found between PEI and RS for men and women. Additionally, the interaction term between PEI women and women's NC on women's RS was significant. Thus, high levels of PEI women buffer the negative effects of women's NC on women's RS.

Positive dyadic coping as moderator. Results of the multiple-group procedure indicated that a model with all regression weights constrained to be equal across groups did yield a good fit ($\chi^2 = 20.97$, $df = 24$, $p = .64$, CFI = 1.00, RMSEA = .00). As above, the restricted model fit was the most parsimonious model that fit well to the data as compared to more restrictive models. This model is depicted in Figure 3 and the corresponding estimates are reported in Table 14. In the young couples, the total amount of explained variance in RS was 51.9% for women and 40.3% for men. In the middle-aged couples, the total amount of explained variance in women's RS was 48.6% and in men's RS 35.3%, and in the oldest couples 63.7% and 55.6%, respectively. All associations between PDC and RS were positive, and all associations between NC and RS were negative, except for the partner effects, which were insignificant. However, in an APIM calculated with NC only, the regression coefficient for the partner effect of women's NC was $-.46$ ($p = .10$) and for the partner effect of men's NC $-.59$ ($p < .05$).

Significant actor and partner effects were found between PDC and RS for men and women, and there was a significant actor effect for women's NC on RS. Furthermore, the interaction term between PDC women and women's NC on women's RS, and the interaction term between PDC men and men's NC on women's RS were significant. Thus, high levels of PDC women mitigate the adverse effects of women's NC on women's RS, and high levels of PDC men mitigate the adverse effects of men's NC on women's RS. Figure 4 depicts the significant interaction between PDC women and women's NC, illustrating all three significant interaction terms reported here.

Additionally, we tested in an exploratory approach whether the moderating effect was stronger within the models for PEI or PDC. We calculated the same two APIMs as reported above, but without the respective interaction term. Models with all regression weights constrained to be equal across groups did yield a good fit (PEI: $\chi^2 = 18.48$, $df = 16$, $p = .30$, CFI = .99, RMSEA = .03; PDC: $\chi^2 = 14.46$, $df = 16$, $p = .56$, CFI = 1.00, RMSEA = .00). Then we calculated the increase in explained variance from the model without the interaction term to the model with interaction term, once for PEI and once for PDC. Concerning women and PEI, the increase in explained variance was 4.6%/0.3%/2.4% for young/middle-aged/older women, respectively, whereas for PDC, the increase in explained variance was 5.3%/5.3%/5.0% for young/middle-aged/older women, respectively. This result suggests that for women of all age groups, the moderating effect is stronger for PDC than for PEI. Concerning men and PEI, the increase in explained variance was 1.1%/0%/1.4% for young/middle-aged/older men, respectively, whereas for PDC, the increase in explained variance was 2.7%/0.2%/0% for young/middle-aged/older men, respectively. This result again suggests that for young and middle-aged men, the moderating effect is stronger for PDC than for PEI, whereas the opposite was true for older men.

Next, we considered the part of the total amount of explained variance in the complete model (with interaction term) that is attributable to the interaction term by dividing the additional explained variance by the total amount of explained variance. This number can be used as an indicator for the size of the buffering effect with respect to the total effect within a given model. For example, for young women and PEI, we divided 4.6% by 55.5%, which resulted in .08, which is lower than .10 (i.e., 5.3% divided by 51.9%) calculated for PDC. This means that for young women, the size of the buffering effect of PDC was larger than that of PEI in the respective models. The same was true for middle-aged women ($0.01 < 0.11$; PEI and PDC, respectively), older women ($0.05 < 0.08$), young men ($0.03 < 0.07$), and middle-aged men ($0 < 0.01$). For older men, the opposite was true ($0.03 > 0$; PEI and PDC,

respectively). Thus, these results indicate that the relative size of the buffering effect of PDC was larger than that of PEI, except for older men.

To sum up, positive forms of interaction – be it PEI or PDC – are associated with RS of oneself and one's partner, and beyond that have the potential to buffer the adverse effects of NC on women's RS. Furthermore, additional analyses indicate that there is a stronger relative moderating effect for PDC than for PEI (except for older men).

Discussion

Using data from 227 couples in three age groups, this study investigated the moderating effect of the partner's positive everyday interaction (PEI) and the partner's positive dyadic coping (PDC) on the association between observed negative conflict communication (NC) and relationship satisfaction (RS). The major finding is that PEI and PDC are related to RS, and this relation is found within partners and across partners and supports previous findings on the significant association between PDC and RS (Bodenmann et al., 2006). Furthermore, positive and supportive behaviors are able to mitigate the detrimental effects of NC on women's RS. Supporting previous studies (Gottman, 1994; Karney & Bradbury, 1995; Weiss & Heyman, 1997), one's NC is negatively related to one's own RS. Notably, these findings hold true for young, middle-aged, and older couples.

In terms of our first hypothesis about NC, we found that all bivariate correlations between NC and RS were negative in all age groups, as expected. In the APIMs with either PEI or PDC as moderator, all those associations were negative, except for a few insignificant associations reflecting partner effects. In the APIM with PDC as moderator, the actor effect of women's NC on women's RS reached significance. Thus, across age groups, NC is negatively associated with both partner's RS, which supports previous findings on conflict communication (e.g., Markman et al., 2010; Woodin, 2011). Women's RS seems to be

slightly more affected by NC than men's RS, which is consistent with findings by Karney and Bradbury (1997).

The second hypothesis, that PEI would buffer the adverse effects of NC on RS, was partially confirmed. The interaction term between PEI women and women's NC on women's RS was significant, the others were not; the interaction term between PEI men and men's NC on women's RS fell just short of statistical significance, however. Thus, in young, middle-aged, and older couples, PEI women (that is, women's rating of their partner) may attenuate the adverse effects of women's NC on women's RS. This result corroborates findings by Caughlin and Huston (2002) and Johnson et al. (2005) and further extends the existing literature by investigating three different age groups. For men, there was no significant interaction effect, indicating that men are less affected by the interplay between NC and PEI than women.

The third hypothesis, that PDC would buffer the adverse effects of NC on RS, was confirmed for the associations with women's RS, but not with men's. In all three age groups, PDC women buffered the negative effects of women's NC on women's RS, and PDC men buffered the negative effects of men's NC on women's RS. For example, if women show high rates of NC their RS tends to be low, yet, if at the same time PDC women (= women's rating of their partner) is high, this detrimental effect can be buffered. These results are consistent with findings reported by Brock and Lawrence (2008) and point to the relevance of positive dyadic coping strategies of both partners for women's RS. How both partners support each other seems to be a crucial factor for women's RS, especially in the context of high negative conflict communication. Findings by Jensen, Rauer, and Volling (2013) emphasize the importance of men's support provision for women's satisfaction, and thus support our result concerning the moderating effect of PDC women. In line with the findings by Huston and Chorost (1994), the third hypothesis was only confirmed when accounting for women's RS.

This and our previous result concerning the second hypothesis might reflect a greater concern women have about interaction and stress management with the partner and the functioning of the relationship. Gottman and Levenson (1992), for example, suggest that women feel more responsible for the emotional well-being in a relationship than men, and that they are socialized to take care of the relationship. If women feel responsible for the interaction with their partner – be it conflict, dyadic coping, or the positive behavior in everyday life – they might also be more affected by the actual outcome.

The fourth hypothesis, that older couples would show less buffering by PEI and PDC compared to younger couples, was not confirmed. The significant moderation effects reported above were similarly found in young, middle-aged, and older couples. Thus, even though previous research suggests that the priorities of marital goals and associated communication behaviors differ between couples of different age groups (Li & Fung, 2011), our results did not provide evidence for differences in the buffering effects of positivity on NC. However, there were mean differences in PEI (for men and women) and in NC (for men) between the three age groups. This indicates that the frequency of some specific communication behaviors differs between age groups, while the associations between the variables remain the same across age groups. Furthermore, in terms of explained variance in RS, there were differences between the age groups, namely that the total amount of explained variance was generally lower in middle-aged couples compared to young and older couples, which suggests that other variables not analyzed here (e.g., commitment) might account for more additional variance in middle-aged couples. Additionally, the multiple roles middle-aged individuals need to balance (e.g., spouse, parent, adult child, see Lachman, 2004) could lead to less time for discussions and interactions with the partner and thus to a lower relevance of communication variables for RS.

Additionally, we analyzed whether the moderating effect was stronger for PEI or PDC, and our results reveal that there are stronger interactions for PDC than for PEI (except for older men). Furthermore, for middle-aged and older women and men, the total amount of explained variance was higher in the APIM with PDC as moderator than in the APIM with PEI as moderator. For the young couples the opposite was true, but when considering the part of the total amount of explained variance that is attributable to the interaction term (an indicator for the relative size of the buffering effect), there was a stronger relative moderating effect for PDC for men and women in all age groups (except for older men). Thus, positive dyadic stress management strategies seem to be more important for attenuating the adverse effects of negative communication than positive exchanges in everyday interactions. This is in line with previous findings by Nussbeck, Hilpert, and Bodenmann (2012) showing that dyadic coping, compared to positivity in everyday life, is more strongly associated with RS.

In sum, the results highlight the buffering potential of positivity in everyday life and positive dyadic coping in the context of high levels of negative conflict communication for women's relationship satisfaction. This buffering effect was found for young, middle-aged, and older couples, and suggests that associations among those interaction variables and relationship satisfaction do not differ between different age groups. This implies that even though there are differences in positivity (PEI) and negativity (NC) between the age groups, the associations with RS and the attenuating effect of positivity remain the same in all age groups. Furthermore, PDC seems to have stronger buffering effects on the adverse impact of negativity than PEI.

The strengths of this study include the sample composition – it consists of 227 young, middle-aged, and older couples – and the use of observational data to assess negative conflict communication. Conversely, the following limitations restrict the extent to which the findings of this study can be generalized: i) the couples had a rather high level of education, ii) all

variables except negative conflict communication were assessed via self-report prone to biases, iii) in our models, the association between observed negative conflict communication and RS was moderated by self-report data and not by observed behavior as well, and the reason for this was that we could not assess PEI through behavioral observation, therefore we chose this approach, and iv) findings on the effects of PEI and PDC may not be readily assigned to couples with no or low negative conflict communication.

Several important implications follow from the findings reported here. First, the manner in which men and women perceive their partner's positive behavior in everyday life and their partner's positive dyadic coping is associated with their own relationship satisfaction, and also with their partner's satisfaction. Thus, by being attentive and supportive, both partners are likely to benefit. In prevention programs or in therapy, this information might lead couples more easily to enhance their positive behavior. Second, the context in which negativity occurs should not be overlooked. Our findings provide evidence for the mitigating effect of positivity when negative conflict communication is high. For prevention programs and in therapy, this means that even though couples discuss conflicts in a negative way, they can stay happy in their relationship, as long as there is enough positive exchange and support between the partners to buffer the detrimental effects of negativity. Thus, the focus in prevention and therapy should not solely be on reducing negative conflict communication, but also on enhancing positive support behaviors and positive exchanges in everyday life. Third, women seem to be more affected by or sensitive to the interplay of positivity and negativity in their relationship, and benefit from positive interactions in the context of high negativity. Thus, in interventions, both partners' interaction behavior should be addressed, and additionally it should be observed how those behaviors or change in behaviors affect women. Fourth, positive and supportive behaviors and their buffering effects on negativity are equally essential in young, middle-aged, and older couples. Fifth, positive support of the partner when he/she experiences stress seems to mitigate the adverse impact of

high negative couple communication better than positive exchanges in everyday life. Thus, in prevention and couple therapy, special attention should be directed to dyadic stress management processes, in particular when couples show high levels of negative conflict communication. Future research on intimate relationships should take into account the context in which negativity occurs, and should further investigate couples of different age groups and the gender difference reported here. Moreover, observational data of positive forms of interaction, which are not part of conflict discussions, would further clarify their potential buffering role on negativity and could differentiate between actual behavior and perceived behavior, as there is some evidence that older adults view their partner's behavior as more positive than it is coded by independent raters (e.g., Story et al., 2007).

Table 11

Demographic Variables

Variables	Young (<i>n</i> = 84 couples)		Middle-aged (<i>n</i> = 69 couples)		Older (<i>n</i> = 74 couples)	
	women	men	women	men	women	men
Married, 1 st marriage	25%	25%	80%	77%	82%	82%
Married, 2 nd marriage	1%	1%	4%	7%	12%	10%
Living together with partner	59%		87%		97%	
Having children	19%	21%	84%	87%	89%	92%
College or university degree	41%	41%	33%	58%	20%	47%
Living in rural areas	48%	43%	77%	61%	27%	31%
Age (in years): <i>M</i>	26.6	28.3	45.9	49.0	70.0	71.3
Age: <i>SD</i>	4.7	4.8	4.3	4.0	4.8	4.8
Age: range	20 – 37	20 – 38	38 – 55	40 – 58	62 – 80	63 – 82
Income 1 – 60,000	75%	48%	61%	4%	46%	29%
Income 61,000 – 120,000	18%	44%	29%	51%	14%	57%
Income > 120,000	–	2%	3%	44%	3%	12%

Note. *N* = 227 couples. Income = yearly net income in Swiss francs (CHF).

Table 12

Summary of Correlations, Means, and Standard Deviations for Negative Conflict Communication, Positive Everyday Interaction, Positive Dyadic Coping, and Relationship Satisfaction and Length in the Three Age Groups

Measure	1	2	3	4	5	<i>M</i>	<i>SD</i>
Young Couples (<i>n</i> = 84)							
1. NC	-	-.26*	-.11	-.29**	.00	0.18	0.15
2. PEI	-.08	-	.62**	.68**	-.24*	4.25	0.78
3. PDC	-.25*	.52**	-	.52**	-.06	3.63	0.68
4. RS	-.28**	.57**	.64**	-	-.01	4.34	0.51
5. RL	.03	-.33**	-.08	.02	-	4.90	3.72
<i>M</i>	0.16	4.07	3.57	4.29	4.90		
<i>SD</i>	0.15	0.73	0.56	0.51	3.72		
Middle-aged Couples (<i>n</i> = 69)							
1. NC	-	-.24	-.17	-.27*	.00	0.14	0.09
2. PEI	-.18	-	.70**	.50**	-.23	3.60	0.87
3. PDC	-.22	.50**	-	.60**	-.14	3.46	0.74
4. RS	-.12	.50**	.47**	-	.00	4.19	0.54
5. RL	.06	-.25*	-.03	-.06	-	19.68	9.11
<i>M</i>	0.11	3.65	3.48	4.24	19.68		
<i>SD</i>	0.10	0.68	0.64	0.52	9.11		
Older Couples (<i>n</i> = 74)							
1. NC	-	-.28*	-.33**	-.46**	-.15	0.14	0.12
2. PEI	-.07	-	.62**	.65**	.22	3.82	0.82
3. PDC	-.08	.56**	-	.73**	.13	3.48	0.75
4. RS	-.19	.58**	.64**	-	.26*	4.28	0.57
5. RL	-.11	.15	.21	.30**	-	44.61	9.98
<i>M</i>	0.18	3.96	3.66	4.43	44.61		
<i>SD</i>	0.16	0.70	0.74	0.48	9.98		

Note. Correlations for women are presented above the diagonal, and correlations for men are presented below the diagonal. Means and standard deviations for women are presented in the

vertical columns, and means and standard deviations for men are presented in the horizontal rows. NC = observed negative conflict communication; PEI = positive everyday interaction partner; PDC = positive dyadic coping partner; RS = relationship satisfaction; RL = relationship length.

* $p < .05$, ** $p < .01$.

Table 13

Unstandardized Estimates and Significance Levels for Model in Figure 2
(Standard Errors in Parentheses; N = 227)

Parameter Estimate	Unstandardized	<i>p</i>
Actor Effects		
NC women → RS women	-.35 (.23)	.12
PEI women → RS women	.30 (.04)	< .001
FNC x FPEI → RS women	.79 (.27)	< .01
NC men → RS men	-.32 (.20)	.12
PEI men → RS men	.30 (.04)	< .001
MNC x MPEI → RS men	.27 (.25)	.27
Partner Effects		
NC women → RS men	.09 (.24)	.71
PEI women → RS men	.17 (.04)	< .001
FNC x FPEI → RS men	.24 (.28)	.39
NC men → RS women	-.13 (.20)	.51
PEI men → RS women	.17 (.04)	< .001
MNC x MPEI → RS women	.47 (.24)	.05

Note. $\chi^2 = 39.97$, $df = 24$, $p = .02$, CFI = .96, RMSEA = .05. Regression weights are constrained to be equal across age groups. NC = observed negative conflict communication; PEI = positive everyday interaction partner; RS = relationship satisfaction; F = women; M = men.

Table 14

Unstandardized Estimates and Significance Levels for Model in Figure 3
(Standard Errors in Parentheses; N = 227)

Parameter Estimate	Unstandardized	<i>p</i>
Actor Effects		
NC women → RS women	-.58 (.20)	< .01
PDC women → RS women	.38 (.04)	< .001
FNC x FPDC → RS women	1.44 (.29)	< .001
NC men → RS men	-.10 (.19)	.60
PDC men → RS men	.37 (.04)	< .001
MNC x MPDC → RS men	.38 (.24)	.12
Partner Effects		
NC women → RS men	.01 (.21)	.97
PDC women → RS men	.21 (.04)	< .001
FNC x FPDC → RS men	.09 (.30)	.77
NC men → RS women	.07 (.19)	.71
PDC men → RS women	.20 (.04)	< .001
MNC x MPDC → RS women	.48 (.24)	< .05

Note. $\chi^2 = 20.97$, $df = 24$, $p = .64$, CFI = 1.00, RMSEA = .00. Regression weights are constrained to be equal across age groups. NC = observed negative conflict communication; PDC = positive dyadic coping partner; RS = relationship satisfaction; F = women; M = men.

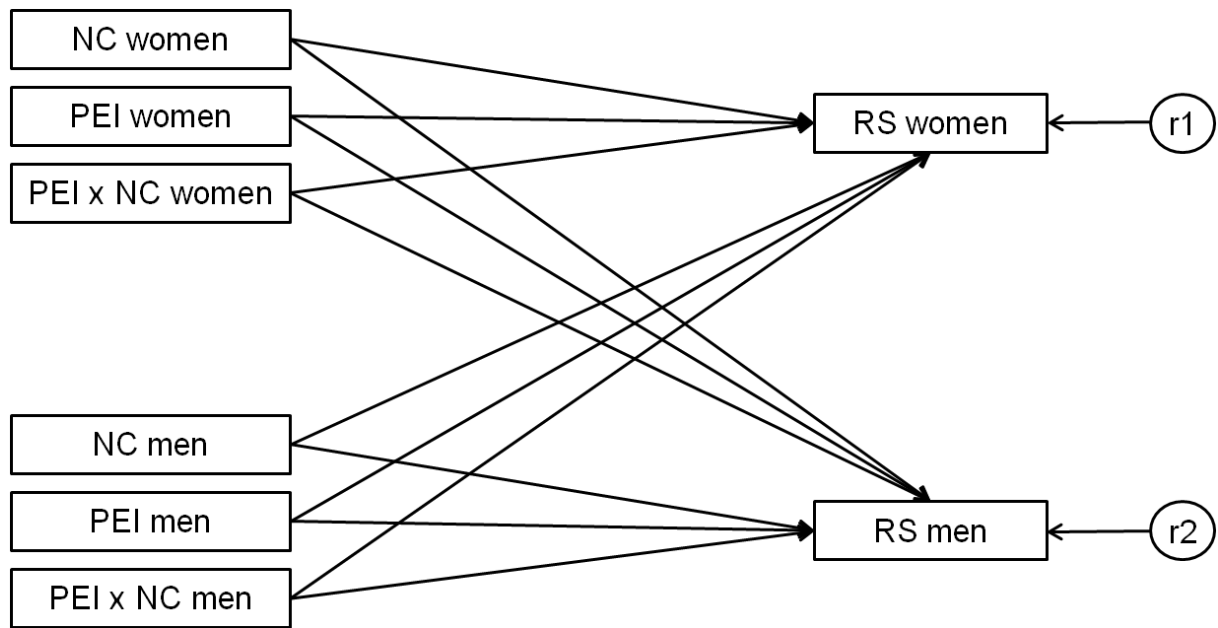


Figure 2. Actor-Partner Interdependence Model with positive everyday interaction as moderator. For reasons of simplicity, all covariances are omitted; all predictors are allowed to covary as are the two residual variables. NC = observed negative conflict communication; PEI = positive everyday interaction partner; PEI x NC = interaction term; RS = relationship satisfaction.

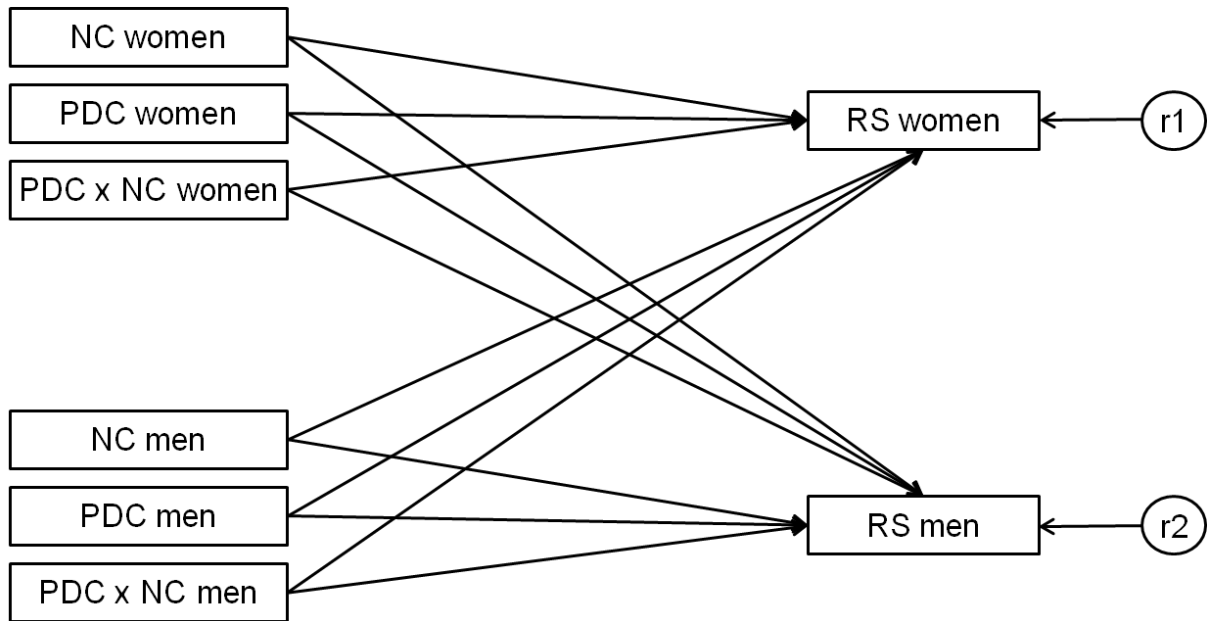


Figure 3. Actor-Partner Interdependence Model with positive dyadic coping as moderator. For reasons of simplicity, all covariances are omitted; all predictors are allowed to covary as are the two residual variables. NC = observed negative conflict communication; PDC = positive dyadic coping partner; PDC x NC = interaction term; RS = relationship satisfaction.

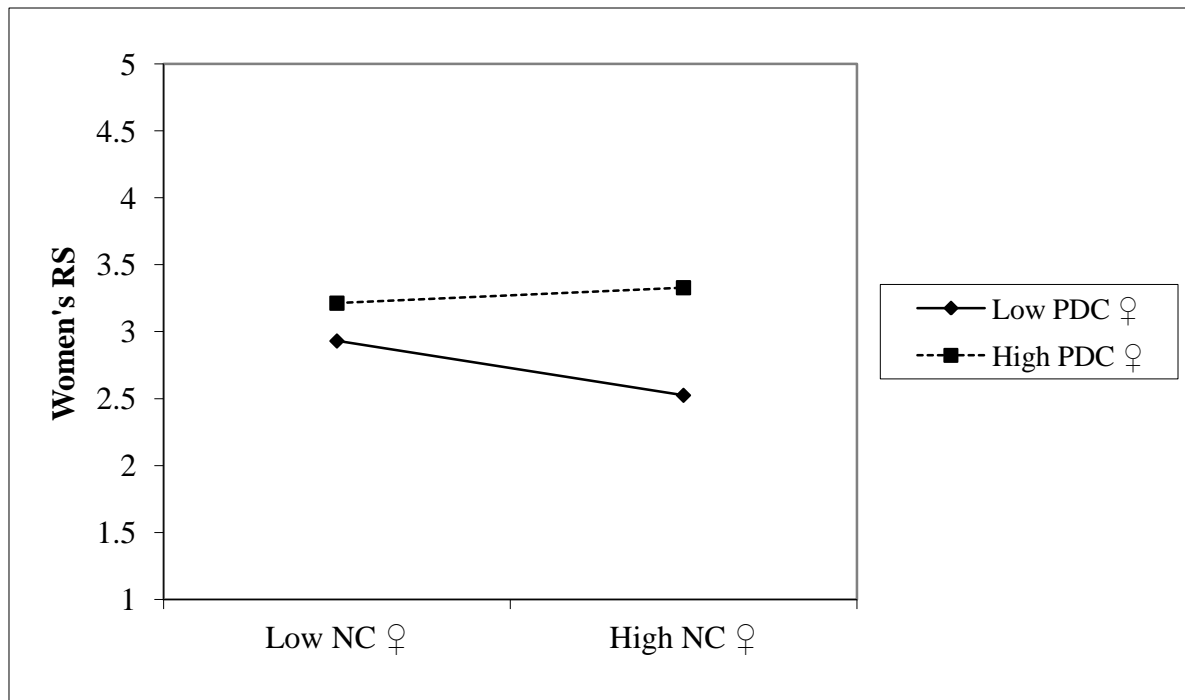


Figure 4. Illustration of the moderating effect that women's positive dyadic coping has on the adverse effects of women's negative conflict communication. NC = observed negative conflict communication; PDC = positive dyadic coping partner; RS = relationship satisfaction. Plotted with the Jeremy Dawson worksheet (Dawson, 2014).

GENERAL DISCUSSION

9. Summary of Findings

The goal of the present thesis was to get a closer look at different forms of couple communication and their significance for relationship functioning. Concerning long-term outcomes, men's dyadic coping competencies and women's positive conflict communication proved to be significant predictors. Concerning cross-sectional analyses, Study II highlights the relevance of positive everyday interaction and positive dyadic coping for relationship satisfaction, and points to some differences between young, middle-aged, and older couples. The results of Study III provide evidence for buffering effects of positive everyday interaction and positive dyadic coping. More specifically, the adverse effects of observed negative conflict communication on women's relationship satisfaction were buffered, and these effects were similarly found in young, middle-aged, and older couples.

Study I. Study I examined different predictors of relationship satisfaction and stability 10 years after the initial measurement point. For women's relationship satisfaction 10 years later, their own initial relationship satisfaction was a significant predictor. For men's relationship satisfaction 10 years later, their own initial relationship satisfaction and their own dyadic coping were significant predictors. Thus, relationship satisfaction was highly predictive of a couple's satisfaction 10 years later, which suggests that relationship satisfaction is quite stable over the course of 10 years. Important to note is that the couples that participated in our study were not newlywed couples as in previous studies (e.g., Johnson et al., 2005; Lavner & Bradbury, 2010), but had an average relationship length of 15 years, and 74% of the couples had children. Thus, these relationships were already quite established and have proved to be successful for over a decade. That is, communication behavior and the other predictor variables have already affected relationship satisfaction by the time of the beginning of the study, and we were predicting residualized satisfaction (controlling for the

effects that the predictor variables have already had on relationship satisfaction by t1) in the second decade of their relationships. This could explain why communication behavior, stress, and individual coping skills were not significant predictors. However, for men, their report of dyadic coping was predictive of their relationship satisfaction 10 years later, indicating that dyadic stress management, mutual support, and joint problem-solving are highly relevant for men. For women, dyadic coping was not a significant predictor of their later relationship satisfaction, possibly because women are more likely than men to rely on other sources of support, for example, best friends or family (Bodenmann, 2000). For relationship stability, the length of relationship and both partners' relationship satisfaction were significant positive predictors, consistent with findings reported by Karney and Bradbury (1995). Furthermore, women's positive conflict communication significantly predicted relationship stability, though not in the expected direction. Women's positive communication predicted lower relationship stability 10 years later. Results by Gottman and Krokoff (1989) and Karney and Bradbury (1997) might provide some support for this unexpected finding. Gottman and Krokoff found that women's expression of anger and contempt was associated with positive change in her relationship satisfaction, whereas women's positive verbal behavior and compliance was related to both partners' decline in relationship satisfaction. Similarly, Karney and Bradbury found that a lack of positivity in women's behavior – that is, more negative behavior – benefits the trajectories of both partners relationship satisfaction. Concerning relationship satisfaction, we did not find an inverse association with women's positivity; we only found it concerning relationship stability. This finding suggests that women's positive communication is beneficial for relationship satisfaction, but harmful for the long-term stability of a relationship.

Study II. Study II, a cross-sectional study based on questionnaire data, investigated the associations between three different forms of couple communication – positive everyday interaction, conflict communication, and dyadic coping – and their association with

relationship satisfaction in three age groups. Additionally, we were interested in the specific relevance of each of these predictors. For young couples, negative communication of the partner and positive everyday interaction of the partner were significantly and in the expected direction associated with one's own relationship satisfaction, for both men and women. Men's report of positive dyadic coping of the partner was significantly associated with men's and women's relationship satisfaction. It seems that in young couples, women's support provisions are of high relevance for both partners' relationship satisfaction. Concerning the relevance of the different predictors, the highest amount of variance in men's relationship satisfaction was explained by positive dyadic coping of the partner (followed by positive everyday interaction of the partner), whereas positive everyday interaction of the partner explained the highest amount of variance in women's relationship satisfaction (followed by positive dyadic coping of the partner). Again, this result suggests that for young men, positive support provision is highly relevant for their relationship satisfaction, which is in line with the result reported in Study I. For young women, positive exchanges in everyday life, such as compliments or the expression of affection, are of high relevance for their relationship satisfaction.

For middle-aged couples, negative communication of the partner was significantly and negatively associated with one's own relationship satisfaction, for both men and women. Positive everyday interaction of the partner was significantly related to the partner's relationship satisfaction, for both men and women (i.e., the higher the ratings of partner A concerning positive everyday interaction of partner B, the higher is partner B's relationship satisfaction). Furthermore, women's report of positive dyadic coping of the partner was significantly associated with their own relationship satisfaction, whereas for men, their report of negative dyadic coping of the partner was significantly associated with their own relationship satisfaction. Thus, middle-aged women benefit from their partners' positive support provision, while middle-aged men suffer from their partners' negative support

provision (e.g., when the partner does not take one's stress seriously). Concerning the relevance of the different predictors, the highest amount of variance in men's relationship satisfaction was explained by negative communication of the partner (followed by negative dyadic coping of the partner), whereas positive dyadic coping of the partner explained the highest amount of variance in women's relationship satisfaction (followed by negative communication of the partner). This result suggests that negative communication is highly relevant for middle-aged couples, and it further supports the associations reported above, namely that positive dyadic coping is of high relevance for women's relationship satisfaction, while negative dyadic coping is of high relevance for men's relationship satisfaction. Additionally, further analyses showed that positive everyday interaction of the partner explained additional variance beyond the other predictors (i.e., unique variance that cannot be explained by the others or the interplay of all predictors).

For older couples, negative communication of the partner, positive everyday interaction of the partner, and positive dyadic coping of the partner were significantly and in the expected direction associated with one's own relationship satisfaction, for both men and women. Concerning the relevance of the different predictors, the highest amount of variance in men's and women's relationship satisfaction was explained by positive dyadic coping of the partner (followed by negative communication of the partner). Thus, positive support provision is highly relevant for older couples' relationship satisfaction, and their satisfaction seems highly sensitive to negative communication. Additionally, further analyses showed that negative communication of the partner and positive everyday interaction of the partner explained additional variance beyond the other predictors (i.e., unique variance that cannot be explained by the others or the interplay of all predictors).

In sum, negative conflict communication of the partner had adverse effects on one's own relationship satisfaction, across age groups and gender. Positive everyday interaction of

the partner is beneficial for one's own relationship satisfaction (young and older couples) and the partner's relationship satisfaction (middle-aged couples), and explains additional unique variance in relationship satisfaction of middle-aged and older couples. Dyadic coping seems to be especially relevant for middle-aged and older couples, but also for men in young couples.

Study III. Study III, a cross-sectional study based on questionnaire and observational data, examined positive everyday interaction and positive dyadic coping as potential buffers against the adverse effects of observed negative conflict communication on relationship satisfaction. The following three findings held true for young, middle-aged, and older couples. First, high levels of positive everyday interaction of the partner reported by women buffered the adverse effects of women's observed negative conflict communication on women's relationship satisfaction. That is, for women of all age groups, positive everyday interaction of the partner may mitigate the adverse effects of their negative communication on their relationship satisfaction. Second, high levels of women's report of positive dyadic coping of the partner buffered the adverse effects of women's observed negative conflict communication on women's relationship satisfaction. That is, for women of all age groups, positive dyadic coping of the partner may attenuate the adverse effects of their negative communication on their relationship satisfaction. Third, high levels of men's report of positive dyadic coping of the partner buffered the adverse effects of men's observed negative conflict communication on women's relationship satisfaction. That is, for men of all age groups, positive dyadic coping of the partner may mitigate the adverse effects of their negative communication on women's relationship satisfaction. These results on moderating effects are in line with previous findings (e.g., Caughlin & Huston, 2002; Johnson et al., 2005). However, there were no significant moderation effects when accounting for men's relationship satisfaction (in line with findings by Huston & Chorost, 1994), suggesting that women might be more affected by negative conflict communication compared to men, but

that these negative effects may be buffered if at the same time there are high levels of positive everyday interaction or positive dyadic coping. Additionally, further analyses were conducted to compare the relative size of the buffering effects of positive everyday interaction and positive dyadic coping. Generally, there was a stronger relative moderating effect for positive dyadic coping than for positive everyday interaction.

In sum, the associations between the variables investigated in Study III did not differ between young, middle-aged, and older couples. Furthermore, positivity in everyday life and positive dyadic coping have the potential to buffer any adverse effects of negative conflict communication on women's relationship satisfaction.

10. Strengths and Limitations

The empirical studies of this thesis have several strengths and limitations which are outlined in the following. The strengths of Study I include the longitudinal design covering 10 years, the sample size including 162 couples, and the variables assessed ranging from communication behavior to coping skills, stress, and well-being. Study I adds to the existing research by assessing a range of different predictor variables and identifying the best predictors of long-term relationship satisfaction and stability. However, couples who participated in Study I had a rather high level of education, an average age of about 42 years, and an average relationship length of 15 years, which limits the possibility to generalize findings to newlywed couples or couples with lower levels of education. Furthermore, the variables were assessed via self-report and are thus prone to biases.

The strengths of Study II include the sample – its size and its composition (three age groups) – and the assessment of three different forms of couple communication. Study II contributes to the existing research by analyzing couples of three different age groups (rather than focusing solely on newlywed couples or comparing middle-aged and older couples) and by analyzing both positive and negative forms of communication and their specific relevance for relationship satisfaction (rather than, e.g., focusing solely on conflict communication or dyadic coping). However, the study had a cross-sectional design and consequently does not admit any causal interpretations of the reported findings. Furthermore, the analyses were based on questionnaire data (as in Study I), participating couples were in quite satisfying relationships and well educated, and the sample was representative of the Swiss middle class. Thus, for couples of lower socioeconomic status or with lower relationship satisfaction, the reported findings might look different. For example, couples experiencing great economic strain might have more negative and more frequent conflict discussions with a greater impact on relationship satisfaction (e.g., Falconier & Epstein, 2011; Stanley et al., 2002).

The strengths of Study III include the sample size and composition, as in Study II (see above). Additionally, observational data – a videotaped conflict discussion – was used to assess negative conflict communication. Study III adds to the existing research by examining two forms of positive behaviors in a non-conflict context (rather than positivity expressed in conflict discussions and rather than, e.g., focusing solely on dyadic coping) as potential buffers against the detrimental effects of negative conflict communication in three different age groups. However, similarly to Study II, this study had a cross-sectional design that does not allow causal inferences, and participating couples had a rather high level of education (see above). Furthermore, couples in Study III expressed rather high levels of negativity in conflict discussions, and our results on the effects of positive everyday interaction and positive dyadic coping may not be readily assigned to couples with no or low expressed negativity.

11. Implications

Based on the findings presented in this thesis the following suggestions for further research and for prevention and intervention are made. Future research should i) collect observational data or diary data especially of positive forms of interaction, ii) consider the context in which negativity occurs, iii) investigate gender differences more thoroughly, iv) examine different age groups in a longitudinal setting, and v) take into account the frequency of conflict and the topic of conflict.

First, our empirical studies did primarily rely on questionnaire data (see previous chapter), except for Study III in which we used observational data on conflict communication. Future studies should additionally include observational data of couple interaction, especially of positive interactions in a non-conflict context (e.g., Graber et al., 2011). This would further enhance our understanding of couples' positive communication and its contribution to relationship outcome. Moreover, diary studies could add to the external validity of the findings reported here, as they are conducted in the natural environment and can assess how frequently conflicts and positive interactions occur (e.g., Janicki et al., 2006). Second, Study III has shown that positivity may buffer any adverse effects of negativity; thus, the context in which negativity occurs should be taken into account. Future studies investigating conflict communication should additionally assess positive forms of couple interaction, such as supportive interactions or interactions characterized by attentiveness, display of affection, and expression of love. These behaviors may mitigate the adverse effects of negative conflict communication – and conflicts arise in every relationship. On the other hand, a decreasing frequency of these positive behaviors may predict divorce, as proposed by the disillusionment model (Huston et al., 2001). Beach and Fincham (2010) concluded that “the study of positive factors should supplement rather than supplant the study of problematic relationship outcomes” (p. 57). Third, Study I found that initial positive conflict communication reported

by women predicted a higher probability of an unstable relationship 10 years later, and Study III found buffering effects of positivity only when accounting for women's relationship satisfaction. Unexpected findings concerning women's conflict communication have also been reported in previous studies (Gottman & Krokoff, 1989; Heavey, Layne, & Christensen, 1993; Karney & Bradbury, 1997) and require further research to better understand the critical role of women's behavior during conflict discussions. Promising approaches might include further investigation of the demand-withdraw interaction pattern and related power issues in relationships (e.g., Eldridge & Christensen, 2002) and further investigation of gender roles (e.g., Faulkner, Davey, & Davey, 2005). Additionally, future research should further investigate whether men's satisfaction might be less affected by negative conflict communication than women's (Huston & Vangelisti, 1991; Schmitt et al., 2007) or whether there might be other variables (e.g., physical affection/sexual intercourse; e.g., Ditzen et al., 2008; Heyman, Hunt-Martorano, Malik, & Slep, 2009) that would buffer any adverse effects of negative conflict communication on men's relationship satisfaction.

Fourth, even though in Study III we did not find different associations between the study variables in the three age groups, in Study II, we did find some differences. Moreover, in both studies, there were mean differences between the three age groups in some communication variables (positive conflict communication, observed negative conflict communication, positive everyday interaction, and negative dyadic coping). However, such differences reported in our studies and in previous research (see chapter 4) might not be explained by age per se, but also by relationship length, relationship experience (e.g., among those who remarry), a selection artifact ("older adults who are unsatisfied with their spouse might be selected out of the pool by divorce, so that older couples in marital research who are still together are more satisfied"; Henry et al., 2007, p. 437), cohort effects, or the interplay of all these factors (Henry et al., 2007; Smith et al., 2009). Further research – especially longitudinal research – is needed to better disentangle these factors contributing to differences

between couples of different ages. Fifth, another aspect that should be considered in future research is how often couples have disagreements, which might be a relevant factor determining the impact of conflict on relationship satisfaction. It might also add to the understanding of couple conflict to address the topics couples argue about. Even though it has been found that it matters more *how* couples manage conflict than *what* they argue about (e.g., Stanley et al., 2002), analyzing the topics of couples' conflict discussions might broaden the understanding of the detrimental processes underlying couple conflict (see Weiss & Heyman, 1997). For example, expressing negative affect when discussing a sexual problem seems to be more relevant for relationship satisfaction than negative affect expressed during a conflict discussion over a nonsexual topic (Rehman et al., 2011).

Our studies suggest implications for prevention and intervention with respect to conflict communication, positive everyday interaction, and dyadic coping. Findings of our three empirical studies indicate that negative conflict communication is generally associated with lower relationship satisfaction, but that women's positive conflict communication may be detrimental for the stability of a relationship in the long run. Programs targeting the training of communication and problem-solving skills have yielded promising outcomes (e.g., the Prevention and Relationship Enhancement Program PREP; Markman, Renick, Floyd, Stanley, & Clements, 1993). However, there is evidence that increases in women's positive communication following participation in the PREP were associated with a higher risk of distress onset for both partners (Schilling, Baucom, Burnett, Allen, & Ragland, 2003) and that increases in women's negative problem-solving communication following a skill-based intervention (Couples Coping Enhancement Training [CCET]; Bodenmann & Shantinath, 2004) predicted slower rates of negative change in their relationship satisfaction (Bodenmann, Bradbury, & Pihet, 2009). These findings are in line with the results reported in Study I and by Gottman and Krokoff (1989) and Karney and Bradbury (1997). Thus, prevention and intervention programs should address women's conflict communication especially carefully,

emphasizing the importance of women's conflict engagement to bring forward important relationship issues.

On the other hand, however, one could argue that there is much more to a marriage or an intimate relationship than conflict discussions. Bradbury et al. (2001) point out that conflicts are not that frequent and that other aspects of intimate relationships beyond conflict (e.g., social support) deserve further attention. Study II and Study III have shown that positive everyday interaction (e.g., paying the partner compliments, expressing love, being affectionate and attentive) is significantly associated with relationship satisfaction and has the potential to mitigate the adverse effects of negativity on women's relationship satisfaction. Thus, Study II and Study III provide evidence for the high relevance of positive everyday interactions between partners (see also Driver & Gottman, 2004). Moreover, it might be easier to enhance (or maintain) positivity in everyday life than to change the way couples manage their conflicts (e.g., to reduce negative behaviors during conflicts). Prevention and intervention programs should therefore address positive exchanges between partners. The enhancement of positivity, for instance, can be attained through the training of reciprocity (e.g., Stuart, 1969; Weiss, Birchler, & Vincent, 1974). In this behavioral approach, positive and rewarding behaviors of both partners are mutually reinforced with the help of quid pro quo arrangements or good faith contracting, and thereby the rate of desired behaviors is likely to increase (see also Weiss, Hops, & Patterson, 1973). Another possibility to enhance positivity would be to motivate couples to engage in exciting activities together, for example, novel or challenging activities. According to the self-expansion model, such shared activities may increase relationship satisfaction (Aron et al., 2002). This approach is of high practical relevance as "this is a procedure that would seem to be capable of being implemented by virtually any couple, even those who would resist or be otherwise unsuitable for the usual verbal counseling methods" (Aron et al., 2002, p. 192). Moreover, with reference to capitalization (see Gable & Reis, 2010), the importance of sharing positive events should be

emphasized in prevention and intervention, that is, it should be conveyed that it is at least equally important to be there for one's partner when things go right as when things go wrong (Gable et al., 2006). Including positive aspects, rather than mainly focusing on problems and conflicts, may provide a valuable addition to couple interventions (Fincham & Beach, 2010).

Concerning dyadic coping, the results of our three studies suggest that dyadic stress management skills play an important role for concurrent relationship satisfaction and are predictive of men's future relationship satisfaction. Moreover, positive dyadic coping buffered the detrimental effects of negative conflict communication on women's relationship satisfaction. These findings provide further support for prevention programs and interventions that address the enhancement of dyadic coping competencies, as the CCET (Bodenmann & Shantinath, 2004) and the coping-oriented couples therapy (COCT; Bodenmann, 2010). According to our results, particularly middle-aged and older couples might benefit from such programs, as dyadic coping seems to be highly relevant in these age groups. Furthermore, such prevention programs and interventions should convey that in the context of high levels of negative conflict communication, men (and also women) have the possibility to counteract the detrimental effects of negative communication on women's relationship satisfaction by engaging in supportive interactions (i.e., positive dyadic coping).

According to our results, training in communication and dyadic coping skills in prevention and intervention approaches should be complemented with a session or a module on the maintenance and enhancement of positivity in everyday life, as positive everyday interactions between partners are of high relevance for a couple's relationship satisfaction. For example, another module could be added to the CCET (Bodenmann & Shantinath, 2004) that addresses positive reinforcements (rewarding exchanges between the partners; see Weiss et al., 1974), responsive sharing of positive events (capitalization; see Gable & Reis, 2010), and shared participation in novel and challenging activities (self-expansion model; see Aron et al.,

2002). Such an additional module on the maintenance and enhancement of positivity might be useful in particular for relationships of longer duration, in which reinforcement erosion (habituation to positive stimuli; see e.g., Bodenmann, 2004; Jacobson & Margolin, 1979) and a decreased rate of positive exchanges might be more prominent than in newly enamored couples.

With respect to age, skills training might be more indicated in young and middle-aged couples (or in the beginning of a relationship), to prepare the couples to constructively resolve arising conflicts and effectively cope with stress. Middle-aged couples in particular are concerned with increased levels of stress due to the multiple roles they need to balance (Lachman, 2004). Conflict resolution skills training with older couples could pose difficulties, because older couples tend to avoid arguments and confrontations (Luong et al., 2011). Avoidance is not necessarily maladaptive for older couples (Holley et al., 2013) and should be accepted to some degree. Furthermore, the dynamic goal theory of marital satisfaction (Li & Fung, 2011) might provide a useful framework for age-specific relevant topics and goals that could be considered accordingly in prevention and intervention.

12. Conclusion

“The essence of any interpersonal relationship is *interaction*” (Thibaut & Kelley, 1959, p. 10). Couples’ communication during conflict, their positive everyday interactions, and their dyadic coping constitute important determinants for satisfying relationships. Conflicts may be challenging and have adverse effects on relationship well-being, but depending on how conflicts are resolved, beneficial long-term effects may result. Stress, for instance due to high work demands, is another challenge couples are confronted with, and stress negatively affects couples’ communication (Bodenmann, 2000). However, if couples find a way to manage their stress jointly and to support each other in positive ways, their relationships benefit in the short and in the long run. Moreover, supportive behaviors have the potential to mitigate any adverse effects of negative conflict communication on women’s relationship satisfaction. Furthermore, positive exchanges in everyday life are an important resource of both partners’ relationship satisfaction, and these positive everyday interactions have the potential to buffer negativity as well. The finding of these buffering effects is encouraging and strongly suggests that prevention and intervention approaches which additionally address positivity are promising.

REFERENCES

- Acitelli, L. K., Douvan, E., & Veroff, J. (1993). Perceptions of conflict in the first year of marriage: How important are similarity and understanding? *Journal of Social and Personal Relationships*, 10, 5–19. doi:10.1177/0265407593101001
- Ackerman, R. A., Kashy, D. A., Donnellan, M. B., & Conger, R. D. (2011). Positive-engagement behaviors in observed family interactions: A social relations perspective. *Journal of Family Psychology*, 25, 719–730. doi:10.1037/a0025288
- Algoe, S. B., Gable, S. L., & Maisel, N. C. (2010). It's the little things: Everyday gratitude as a booster shot for romantic relationships. *Personal Relationships*, 17, 217–233. doi:10.1111/j.1475-6811.2010.01273.x
- Algoe, S. B., Haidt, J., & Gable, S. L. (2008). Beyond reciprocity: Gratitude and relationships in everyday life. *Emotion*, 8, 425–429. doi:10.1037/1528-3542.8.3.425
- Arbuckle, J. L. (2011). *Amos (Version 20.0) [Computer Program]*. Chicago, USA: IBM SPSS.
- Aron, A., Norman, C. C., Aron, E. N., & Lewandowski, G. (2002). Shared participation in self-expanding activities: Positive effects on experienced marital quality. In P. Noller & J. A. Feeney (Eds.), *Understanding marriage: Developments in the study of couple interaction* (pp. 177–194). Cambridge, UK: Cambridge University Press.
- Aron, A., Norman, C. C., Aron, E. N., McKenna, C., & Heyman, R. E. (2000). Couples' shared participation in novel and arousing activities and experienced relationship quality. *Journal of Personality and Social Psychology*, 78, 273–284. doi:10.1037/0022-3514.78.2.273
- Arránz Becker, O., Rüssmann, K., & Hill, P. B. (2005). Wahrnehmung und Bewältigung von Konflikten und die Stabilität von Partnerschaften [Couple interaction, perceived conflict, and relationship stability]. *Journal of Family Research*, 17, 251–278.

- Badr, H. (2004). Coping in marital dyads: A contextual perspective on the role of gender and health. *Personal Relationships, 11*, 197–211. doi:10.1111/j.1475-6811.2004.00078.x
- Baucom, B. R., McFarland, P. T., & Christensen, A. (2010). Gender, topic, and time in observed demand–withdraw interaction in cross- and same-sex couples. *Journal of Family Psychology, 24*, 233–242. doi:10.1037/a0019717
- Beach, S. R. H., & Fincham, F. D. (2010). Conflict can be constructive: Reflections on the dialectics of relationship science. *Journal of Family Theory & Review, 2*, 54–57. doi:10.1111/j.1756-2589.2010.00038.x
- Beach, S. R. H., Katz, J., Kim, S., & Brody, G. H. (2003). Prospective effects of marital satisfaction on depressive symptoms in established marriages: A dyadic model. *Journal of Social and Personal Relationships, 20*(3), 355–371. doi:10.1177/0265407503020003005
- Becker, P. (1984). *Bewältigungsverhalten und seelische Gesundheit. (Psychological report from Trier n°11, Vol. 5)*. Trier: Universität, Institut für Psychologie.
- Bertoni, A., & Bodenmann, G. (2010). Satisfied and dissatisfied couples: Positive and negative dimensions, conflict styles, and relationships with family of origin. *European Psychologist, 15*(3), 175–184. doi:10.1027/1016-9040/a000015
- Birchler, G. R., Weiss, R. L., & Vincent, J. P. (1975). Multimethod analysis of social reinforcement exchange between maritally distressed and nondistressed spouse and stranger dyads. *Journal of Personality and Social Psychology, 31*, 349–360. doi:10.1037/h0076280
- Birditt, K. S., Brown, E., Orbuch, T. L., & McIlvane, J. M. (2010). Marital conflict behaviors and implications for divorce over 16 years. *Journal of Marriage & Family, 72*, 1188–1204. doi:10.1111/j.1741-3737.2010.00758.x

- Birditt, K. S., Fingerman, K. L., & Almeida, D. M. (2005). Age differences in exposure and reactions to interpersonal tensions: A daily diary study. *Psychology and Aging, 20*, 330–340. doi:10.1037/0882-7974.20.2.330
- Blanchard-Fields, F., Mienaltowski, A., & Seay, R. B. (2007). Age differences in everyday problem-solving effectiveness: Older adults select more effective strategies for interpersonal problems. *The Journals of Gerontology, Series B: Psychological Sciences and Social Sciences, 62*, P61–P64.
- Bodenmann, G. (1995). A systemic-transactional conceptualization of stress and coping in couples. *Swiss Journal of Psychology, 54*, 34–49.
- Bodenmann, G. (2000). *Stress und Coping bei Paaren [Stress and coping in couples]*. Göttingen: Hogrefe.
- Bodenmann, G. (2004). *Verhaltenstherapie mit Paaren: Ein modernes Handbuch für die psychologische Beratung und Behandlung [Behavioral therapy with couples: A modern guide for psychological counseling and treatment]*. Bern: Huber.
- Bodenmann, G. (2005). Dyadic coping and its significance for marital functioning. In T. Revenson, K. Kayser, & G. Bodenmann (Eds.), *Couples coping with stress: Emerging perspectives on dyadic coping* (pp. 33–50). Washington, DC: American Psychological Association.
- Bodenmann, G. (2008). *Dyadisches Coping Inventar (DCI) [Dyadic Coping Inventory (DCI)]*. Bern: Huber.
- Bodenmann, G. (2010). New themes in couple therapy: The role of stress, coping, and social support. In K. Hahlweg, M. Grawe, & D. H. Baucom (Eds.), *Enhancing couples: The shape of couple therapy to come* (pp. 142–156). Cambridge, MA: Hogrefe.
- Bodenmann, G., Bradbury, T. N., & Pihet, S. (2009). Relative contributions of treatment-related changes in communication skills and dyadic coping skills to the longitudinal

- course of marriage in the framework of marital distress prevention. *Journal of Divorce & Remarriage*, 50, 1–21. doi:10.1080/10502550802365391
- Bodenmann, G., Charvoz, L., Bradbury, T. N., Bertoni, A., Iafrate, R., Giuliani, C., ... Behling, J. (2007). The role of stress in divorce: A three-nation retrospective study. *Journal of Social and Personal Relationships*, 24, 707–728. doi:10.1177/0265407507081456
- Bodenmann, G., & Cina, A. (2005). Stress and coping among stable-satisfied, stable-distressed and separated/divorced Swiss couples: A 5-year prospective longitudinal study. *Journal of Divorce & Remarriage*, 44(1-2), 71–89. doi:10.1300/J087v44n01_04
- Bodenmann, G., Kaiser, A., Hahlweg, K., & Fehm-Wolfsdorf, G. (1998). Communication patterns during marital conflict: A cross-cultural replication. *Personal Relationships*, 5(3), 343–356. doi:10.1111/j.1475-6811.1998.tb00176.x
- Bodenmann, G., Ledermann, T., & Bradbury, T. (2007). Stress, sex, and satisfaction in marriage. *Personal Relationships*, 14(4), 551–569. doi:10.1111/j.1475-6811.2007.00171.x
- Bodenmann, G., Meuwly, N., Bradbury, T. N., Gmelch, S., & Ledermann, T. (2010). Stress, anger, and verbal aggression in intimate relationships: Moderating effects of individual and dyadic coping. *Journal of Social and Personal Relationships*, 27(3), 408–424. doi:10.1177/0265407510361616
- Bodenmann, G., Meuwly, N., & Kayser, K. (2011). Two conceptualizations of dyadic coping and their potential for predicting relationship quality and individual well-being. *European Psychologist*, 16, 255–266. doi:10.1027/1016-9040/a000068
- Bodenmann, G., Perrez, M., Schär, M., & Trepp, A. (2004). *Klassische Lerntheorien [Classical learning theories]*. Bern: Huber.

- Bodenmann, G., Pihet, S., & Kayser, K. (2006). The relationship between dyadic coping and marital quality: A 2-year longitudinal study. *Journal of Family Psychology*, 20, 485–493. doi:10.1037/0893-3200.20.3.485
- Bodenmann, G., & Shantinath, S. D. (2004). The Couples Coping Enhancement Training (CCET): A new approach to prevention of marital distress based upon stress and coping. *Family Relations*, 53, 477–484. doi:10.1111/j.0197-6664.2004.00056.x
- Bodenmann, G., & Widmer, K. (2000). Stressbewältigung im Alter: Ein Vergleich von Paaren jüngerer, mittleren und höheren Alters [Coping in elderly couples: A comparison with young and middle-aged couples]. *Zeitschrift Für Gerontologie Und Geriatrie*, 33, 217–228. doi:10.1007/s003910070063
- Bradbury, T. N., & Karney, B. R. (2004). Understanding and altering the longitudinal course of marriage. *Journal of Marriage and Family*, 66, 862–879. doi:10.1111/j.0022-2445.2004.00059.x
- Bradbury, T., Rogge, R., & Lawrence, E. (2001). Reconsidering the role of conflict in marriage. In A. Booth, A. C. Crouter, & M. Clements (Eds.), *Couples in conflict* (pp. 59–81). Mahwah, NJ: Lawrence Erlbaum.
- Brock, R. L., & Lawrence, E. (2008). A longitudinal investigation of stress spillover in marriage: Does spousal support adequacy buffer the effects? *Journal of Family Psychology*, 22(1), 11–20. doi:10.1037/0893-3200.22.1.11
- Canary, D. J., & Dainton, M. (2006). Maintaining relationships. In A. L. Vangelisti & D. Perlman (Eds.), *The cambridge handbook of personal relationships* (pp. 727–743). New York, NY: Cambridge University Press.
- Canary, D. J., & Stafford, L. (1992). Relational maintenance strategies and equity in marriage. *Communication Monographs*, 59, 243–267.

- Canary, D. J., Stafford, L., & Semic, B. A. (2002). A panel study of the associations between maintenance strategies and relational characteristics. *Journal of Marriage and Family*, 64, 395–406. doi:10.1111/j.1741-3737.2002.00395.x
- Carstensen, L. L. (1993). Motivation for social contact across the life span: A theory of socioemotional selectivity. In J. E. Jacobs (Ed.), *Developmental perspectives on motivation: Nebraska Symposium on Motivation 1992* (Vol. 40, pp. 209–254). Lincoln: University of Nebraska Press.
- Carstensen, L. L., Gottman, J. M., & Levenson, R. W. (1995). Emotional behavior in long-term marriage. *Psychology and Aging*, 10, 140–149.
- Caughlin, J. P., & Huston, T. L. (2002). A contextual analysis of the association between demand/withdraw and marital satisfaction. *Personal Relationships*, 9, 95–119.
- Caughlin, J. P., & Huston, T. L. (2006). The affective structure of marriage. In A. L. Vangelisti & D. Perlman (Eds.), *The cambridge handbook of personal relationships* (pp. 131–155). New York, NY: Cambridge University Press.
- Caughlin, J. P., & Huston, T. L. (2010). The flourishing literature on flourishing relationships. *Journal of Family Theory & Review*, 2, 25–35. doi:10.1111/j.1756-2589.2010.00034.x
- Charles, S. T., Piazza, J. R., Luong, G., & Almeida, D. M. (2009). Now you see it, now you don't: Age differences in affective reactivity to social tensions. *Psychology and Aging*, 24, 645–653. doi:10.1037/a0016673
- Christensen, A. (1988). Dysfunctional interaction patterns in couples. In P. Noller & M. A. Fitzpatrick (Eds.), *Perspectives on marital interaction* (pp. 31–52). Philadelphia: Multilingual Matters.
- Christensen, A., & Heavey, C. L. (1990). Gender and social structure in the demand/withdraw pattern of marital conflict. *Journal of Personality and Social Psychology*, 59, 73–81. doi:10.1037/0022-3514.59.1.73

- Christensen, A., & Shenk, J. L. (1991). Communication, conflict, and psychological distance in nondistressed, clinic, and divorcing couples. *Journal of Consulting and Clinical Psychology*, 59, 458–463. doi:10.1037/0022-006X.59.3.458
- Christian, L. M., Graham, J. E., Padgett, D. A., Glaser, R., & Kiecolt-Glaser, J. K. (2006). Stress and wound healing. *Neuroimmunomodulation*, 13(5-6), 337–346. doi:10.1159/000104862
- Clements, M. L., Stanley, S. M., & Markman, H. J. (2004). Before they said “I do”: Discriminating among marital outcomes over 13 years. *Journal of Marriage and Family*, 66, 613–626. doi:10.1111/j.0022-2445.2004.00041.x
- Cook, W., & Kenny, D. (2005). The Actor-Partner Interdependence Model: A model of bidirectional effects in developmental studies. *International Journal of Behavioral Development*, 29, 101–109. doi:10.1080/01650250444000405
- Coyne, J. C., Rohrbaugh, M. J., Shoham, V., Sonnega, J. S., Nicklas, J. M., & Cranford, J. A. (2001). Prognostic importance of marital quality for survival of congestive heart failure. *The American Journal of Cardiology*, 88, 526–529. doi:10.1016/S0002-9149(01)01731-3
- Dawson, J. F. (2014). *Interpreting interaction effects*. Retrieved June 19, 2014, from <http://www.jeremydawson.co.uk/slopes.htm>
- Debrot, A., Cook, W. L., Perrez, M., & Horn, A. B. (2012). Deeds matter: Daily enacted responsiveness and intimacy in couples’ daily lives. *Journal of Family Psychology*, 26, 617–627. doi:10.1037/a0028666
- Debrot, A., Schoebi, D., Perrez, M., & Horn, A. B. (2013). Touch as an interpersonal emotion regulation process in couples’ daily lives: The mediating role of psychological intimacy. *Personality and Social Psychology Bulletin*, 39, 1373–1385. doi:10.1177/0146167213497592

- Dehle, C., Larsen, D., & Landers, J. E. (2001). Social support in marriage. *American Journal of Family Therapy*, 29, 307–324. doi:10.1080/01926180152588725
- Diehl, M., Coyle, N., & Labouvie-Vief, G. (1996). Age and sex differences in strategies of coping and defense across the life span. *Psychology and Aging*, 11, 127–139. doi:10.1037/0882-7974.11.1.127
- Diener, E., Gohm, C. L., Suh, E., & Oishi, S. (2000). Similarity of the relations between marital status and subjective well-being across cultures. *Journal of Cross-Cultural Psychology*, 31, 419–436. doi:10.1177/0022022100031004001
- Diener, E., Suh, E. M., Lucas, R. E., & Smith, H. L. (1999). Subjective well-being: Three decades of progress. *Psychological Bulletin*, 125, 276–302. doi:10.1037/0033-2909.125.2.276
- Ditzen, B., Hoppmann, C., & Klumb, P. (2008). Positive couple interactions and daily cortisol: On the stress-protecting role of intimacy. *Psychosomatic Medicine*, 70(8), 883–889. doi:10.1097/PSY.0b013e318185c4fc
- Doohan, E.-A. M., & Manusov, V. (2004). The communication of compliments in romantic relationships: An investigation of relational satisfaction and sex differences and similarities in compliment behavior. *Western Journal of Communication*, 68, 170–194.
- Driver, J. L., & Gottman, J. M. (2004). Daily marital interactions and positive affect during marital conflict among newlywed couples. *Family Process*, 43, 301–314. doi:10.1111/j.1545-5300.2004.00024.x
- Ebner, N. C., Freund, A. M., & Baltes, P. B. (2006). Developmental changes in personal goal orientation from young to late adulthood: From striving for gains to maintenance and prevention of losses. *Psychology and Aging*, 21, 664–678. doi:10.1037/0882-7974.21.4.664

- Eldridge, K. A., & Christensen, A. (2002). Demand-withdraw communication during couple conflict: A review and analysis. In P. Noller & J. A. Feeney (Eds.), *Understanding marriage: Developments in the study of couple interaction* (pp. 289–322). Cambridge, UK: Cambridge University Press.
- Falconier, M. K., & Epstein, N. B. (2011). Female-demand/male-withdraw communication in Argentinian couples: A mediating factor between economic strain and relationship distress. *Personal Relationships*, 18, 586–603. doi:10.1111/j.1475-6811.2010.01326.x
- Falconier, M. K., Nussbeck, F., & Bodenmann, G. (2013). Dyadic coping in Latino couples: validity of the Spanish version of the Dyadic Coping Inventory. *Anxiety, Stress & Coping*, 26, 447–466. doi:10.1080/10615806.2012.699045
- Faulkner, R. A., Davey, M., & Davey, A. (2005). Gender-related predictors of change in marital satisfaction and marital conflict. *American Journal of Family Therapy*, 33, 61–83. doi:10.1080/01926180590889211
- Fincham, F. D., & Beach, S. R. H. (2010). Of memes and marriage: Toward a positive relationship science. *Journal of Family Theory & Review*, 2, 4–24. doi:10.1111/j.1756-2589.2010.00033.x
- Fincham, F. D., Stanley, S. M., & Beach, S. R. H. (2007). Transformative processes in marriage: An analysis of emerging trends. *Journal of Marriage and Family*, 69, 275–292. doi:10.1111/j.1741-3737.2007.00362.x
- Fitzpatrick, M. A. (1988). *Between husbands and wives: Communication in marriage*. Beverly Hills, CA: Sage.
- Gable, S. L., Gonzaga, G. C., & Strachman, A. (2006). Will you be there for me when things go right? Supportive responses to positive event disclosures. *Journal of Personality and Social Psychology*, 91(5), 904–917. doi:10.1037/0022-3514.91.5.904
- Gable, S. L., & Reis, H. T. (2010). Good news! Capitalizing on positive events in an interpersonal context. In M. P. Zanna (Ed.), *Advances in Experimental Social*

- Psychology* (Vol. 42, pp. 195–257). San Diego: Academic Press. Retrieved from <http://linkinghub.elsevier.com/retrieve/pii/S0065260110420043>
- Gable, S. L., Reis, H. T., Impett, E. A., & Asher, E. R. (2004). What do you do when things go right? The intrapersonal and interpersonal benefits of sharing positive events. *Journal of Personality and Social Psychology*, 87(2), 228–245. doi:10.1037/0022-3514.87.2.228
- Gordon, C. L., Arnette, R. A. M., & Smith, R. E. (2011). Have you thanked your spouse today?: Felt and expressed gratitude among married couples. *Personality and Individual Differences*, 50, 339–343. doi:10.1016/j.paid.2010.10.012
- Gottman, J. M. (1993). The roles of conflict engagement, escalation, and avoidance in marital interaction: A longitudinal view of five types of couples. *Journal of Consulting and Clinical Psychology*, 61, 6–15.
- Gottman, J. M. (1994). *What predicts divorce? The relationship between marital processes and marital outcomes*. Hillsdale, NJ: Erlbaum.
- Gottman, J. M., Coan, J., Carrere, S., & Swanson, C. (1998). Predicting marital happiness and stability from newlywed interactions. *Journal of Marriage and Family*, 60, 5–22. doi:10.2307/353438
- Gottman, J. M., & Krokoff, L. J. (1989). Marital interaction and satisfaction: A longitudinal view. *Journal of Consulting and Clinical Psychology*, 57, 47–52.
- Gottman, J. M., & Levenson, R. W. (1992). Marital processes predictive of later dissolution: Behavior, physiology, and health. *Journal of Personality and Social Psychology*, 63, 221–233. doi:10.1037/0022-3514.63.2.221
- Gottman, J. M., & Levenson, R. W. (2000). The timing of divorce: Predicting when a couple will divorce over a 14-year period. *Journal of Marriage and Family*, 62, 737–745.

- Graber, E. C., Laurenceau, J.-P., Miga, E., Chango, J., & Coan, J. (2011). Conflict and love: Predicting newlywed marital outcomes from two interaction contexts. *Journal of Family Psychology*, 25, 541–550. doi:10.1037/a0024507
- Gulledge, A. K., Gulledge, M. H., & Stahmann, R. F. (2003). Romantic physical affection types and relationship satisfaction. *The American Journal of Family Therapy*, 31, 233–242. doi:10.1080/01926180390201936
- Hahlweg, K. (1996). *Fragebogen zur Partnerschaftsdiagnostik (FPD) [Marriage Diagnostic Questionnaire]*. Göttingen: Hogrefe.
- Heavey, C. L., Layne, C., & Christensen, A. (1993). Gender and conflict structure in marital interaction: A replication and extension. *Journal of Consulting and Clinical Psychology*, 61, 16–27. doi:10.1037/0022-006X.61.1.16
- Hendrick, S. S. (1988). A generic measure of relationship satisfaction. *Journal of Marriage and Family*, 50, 93–98. doi:10.2307/352430
- Henry, N. J. M., Berg, C. A., Smith, T. W., & Florsheim, P. (2007). Positive and negative characteristics of marital interaction and their association with marital satisfaction in middle-aged and older couples. *Psychology and Aging*, 22, 428–441. doi:10.1037/0882-7974.22.3.428
- Herzberg, P. Y. (2013). Coping in relationships: the interplay between individual and dyadic coping and their effects on relationship satisfaction. *Anxiety, Stress & Coping*, 26, 136–153. doi:10.1080/10615806.2012.655726
- Heyman, R. E., Hunt-Martorano, A. N., Malik, J., & Slep, A. M. S. (2009). Desired change in couples: Gender differences and effects on communication. *Journal of Family Psychology*, 23, 474–484. doi:10.1037/a0015980
- Holley, S. R., Haase, C. M., & Levenson, R. W. (2013). Age-related changes in demand-withdraw communication behaviors. *Journal of Marriage and Family*, 75, 822–836. doi:10.1111/jomf.12051

- Huston, T. L., Caughlin, J. P., Houts, R. M., Smith, S. E., & George, L. J. (2001). The connubial crucible: Newlywed years as predictors of marital delight, distress, and divorce. *Journal of Personality and Social Psychology*, 80, 237–252.
doi:10.1037/0022-3514.80.2.237
- Huston, T. L., & Chorost, A. F. (1994). Behavioral buffers on the effect of negativity on marital satisfaction: A longitudinal study. *Personal Relationships*, 1, 223–239.
doi:10.1111/j.1475-6811.1994.tb00063.x
- Huston, T. L., & Vangelisti, A. L. (1991). Socioemotional behavior and satisfaction in marital relationships: A longitudinal study. *Journal of Personality and Social Psychology*, 61, 721–733. doi:10.1037/0022-3514.61.5.721
- Jacobson, N. S., & Margolin, G. (1979). *Marital therapy: Strategies based on social learning and behavior exchange principles*. New York: Brunner/Mazel.
- Janicki, D. L., Kamarck, T. W., Shiffman, S., & Gwaltney, C. J. (2006). Application of ecological momentary assessment to the study of marital adjustment and social interactions during daily life. *Journal of Family Psychology*, 20, 168–172.
doi:10.1037/0893-3200.20.1.168
- Janke, W., Erdmann, G., & Kallus, W. (Eds.). (1985). *Stressverarbeitungsfragebogen (SVF) [Stress Management Questionnaire]*. Göttingen: Hogrefe.
- Jensen, J. F., Rauer, A. J., & Volling, B. (2013). A dyadic view of support in marriage: The critical role of men's support provision. *Sex Roles*, 68(7-8), 427–438.
doi:10.1007/s11199-012-0256-x
- Johnson, K. L., & Roloff, M. E. (2000). Correlates of the perceived resolvability and relational consequences of serial arguing in dating relationships: Argumentative features and the use of coping strategies. *Journal of Social and Personal Relationships*, 17(4-5), 676–686. doi:10.1177/0265407500174011

- Johnson, M. D., Cohan, C. L., Davila, J., Lawrence, E., Rogge, R. D., Karney, B. R., ...
- Bradbury, T. N. (2005). Problem-solving skills and affective expressions as predictors of change in marital satisfaction. *Journal of Consulting and Clinical Psychology, 73*, 15–27. doi:10.1037/0022-006X.73.1.15
- Kamp Dush, C. M., & Taylor, M. G. (2012). Trajectories of marital conflict across the life course: Predictors and interactions with marital happiness trajectories. *Journal of Family Issues, 33*, 341–368. doi:10.1177/0192513X11409684
- Kamp Dush, C. M., Taylor, M. G., & Kroeger, R. A. (2008). Marital happiness and psychological well-being across the life course. *Family Relations, 57*(2), 211–226. doi:10.1111/j.1741-3729.2008.00495.x
- Karney, B. R., & Bradbury, T. N. (1995). The longitudinal course of marital quality and stability: A review of theory, method, and research. *Psychological Bulletin, 118*, 3–34.
- Karney, B. R., & Bradbury, T. N. (1997). Neuroticism, marital interaction, and the trajectory of marital satisfaction. *Journal of Personality and Social Psychology, 72*, 1075–1092.
- Kiecolt-Glaser, J. K., Loving, T. J., Stowell, J. R., Malarkey, W. B., Lemeshow, S., Dickinson, S. L., & Glaser, R. (2005). Hostile marital interactions, proinflammatory cytokine production, and wound healing. *Archives of General Psychiatry, 62*(12), 1377–1384. doi:10.1001/archpsyc.62.12.1377
- Lachman, M. E. (2004). Development in midlife. *Annual Review of Psychology, 55*, 305–331. doi:10.1146/annurev.psych.55.090902.141521
- Langston, C. A. (1994). Capitalizing on and coping with daily-life events: Expressive responses to positive events. *Journal of Personality and Social Psychology, 67*(6), 1112–1125. doi:10.1037/0022-3514.67.6.1112
- Lavner, J. A., & Bradbury, T. N. (2010). Patterns of change in marital satisfaction over the newlywed years. *Journal of Marriage and Family, 72*(5), 1171–1187. doi:10.1111/j.1741-3737.2010.00757.x

- Lavner, J. A., & Bradbury, T. N. (2012). Why do even satisfied newlyweds eventually go on to divorce? *Journal of Family Psychology*, 26, 1–10. doi:10.1037/a0025966
- Lawrence, E., Pederson, A., Bunde, M., Barry, R. A., Brock, R. L., Fazio, E., ... Dzankovic, S. (2008). Objective ratings of relationship skills across multiple domains as predictors of marital satisfaction trajectories. *Journal of Social and Personal Relationships*, 25, 445–466. doi:10.1177/0265407508090868
- Ledermann, T., & Bodenmann, G. (2006). Moderator- und Mediatoreffekte bei dyadischen Daten: Zwei Erweiterungen des Akteur-Partner-Interdependenz- Modells [Moderator and mediator effects in dyadic research: Two extensions of the Actor-Partner Interdependence Model]. *Zeitschrift Für Sozialpsychologie*, 37(1), 27–40. doi:10.1024/0044-3514.37.1.27
- Ledermann, T., Bodenmann, G., Rudaz, M., & Bradbury, T. N. (2010). Stress, communication, and marital quality in couples. *Family Relations*, 59(2), 195–206. doi:10.1111/j.1741-3729.2010.00595.x
- Levenson, R. W., Carstensen, L. L., & Gottman, J. M. (1993). Long-term marriage: Age, gender, and satisfaction. *Psychology and Aging*, 8, 301–313. doi:10.1037/0882-7974.8.2.301
- Levenson, R. W., Carstensen, L. L., & Gottman, J. M. (1994). The influence of age and gender on affect, physiology, and their interrelations: A study of long-term marriages. *Journal of Personality and Social Psychology*, 67, 56–68.
- Levesque, C., Lafontaine, M.-F., Caron, A., Flesch, J. L., & Bjornson, S. (2014). Dyadic empathy, dyadic coping, and relationship satisfaction: A dyadic model. *Europe's Journal of Psychology*, 10, 118–134. doi:10.5964/ejop.v10i1.697
- Lewin, K. (1948). *Resolving social conflicts: Selected papers on group dynamics*. New York: Harper & Brothers.

- Li, T., & Fung, H. H. (2011). The dynamic goal theory of marital satisfaction. *Review of General Psychology, 15*, 246–254. doi:10.1037/a0024694
- Luong, G., & Charles, S. T. (2014). Age differences in affective and cardiovascular responses to a negative social interaction: The role of goals, appraisals, and emotion regulation. *Developmental Psychology, 50*, 1919–1930. doi:10.1037/a0036621
- Luong, G., Charles, S. T., & Fingerman, K. L. (2011). Better with age: Social relationships across adulthood. *Journal of Social and Personal Relationships, 28*, 9–23. doi:10.1177/0265407510391362
- Markman, H. J., Renick, M. J., Floyd, F. J., Stanley, S. M., & Clements, M. (1993). Preventing marital distress through communication and conflict management training: A 4- and 5-year follow-up. *Journal of Consulting and Clinical Psychology, 61*, 70–77. doi:10.1037/0022-006X.61.1.70
- Markman, H. J., Rhoades, G. K., Stanley, S. M., Ragan, E. P., & Whitton, S. W. (2010). The premarital communication roots of marital distress and divorce: The first five years of marriage. *Journal of Family Psychology, 24*, 289–298. doi:10.1037/a0019481
- McNulty, J. K., & Russell, V. M. (2010). When “negative” behaviors are positive: A contextual analysis of the long-term effects of problem-solving behaviors on changes in relationship satisfaction. *Journal of Personality and Social Psychology, 98*, 587–604. doi:10.1037/a0017479
- Meyer, J., Bodenmann, G., Binz, G., & Brunner, L. (2005). Subjektiv eingeschätzte partnerschaftliche Kommunikationsqualität in fünf Alterskohorten [Subjective appraisal of the quality of marital communication in five cohorts]. *Zeitschrift fuer Klinische Psychologie, Psychiatrie und Psychotherapie, 53*(4), 342–355.
- Mohr, G. (1986). *Die Erfassung psychischer Befindlichkeitsbeeinträchtigungen bei Industriearbeitern [The assessment of psychological health impairments in industrial workers]*. Frankfurt a. M.: Peter Lang.

- Neff, L. A., & Karney, B. R. (2004). How does context affect intimate relationships? Linking external stress and cognitive processes within marriage. *Personality and Social Psychology Bulletin*, 30(2), 134–148. doi:10.1177/0146167203255984
- Neff, L. A., & Karney, B. R. (2007). Stress crossover in newlywed marriage: A longitudinal and dyadic perspective. *Journal of Marriage and Family*, 69(3), 594–607. doi:10.1111/j.1741-3737.2007.00394.x
- Noller, P., & Feeney, J. A. (1998). Communication in early marriage: Responses to conflict, nonverbal accuracy, and conversational patterns. In T. N. Bradbury (Ed.), *The developmental course of marital dysfunction* (pp. 11–43). Cambridge, UK: Cambridge University Press.
- Nussbeck, F. W., Hilpert, P., & Bodenmann, G. (2012). Der Zusammenhang von positivem und negativem Interaktionsverhalten in der Partnerschaft mit Partnerschaftszufriedenheit und Trennungsabsichten [The association between positive and negative interaction behavior with relationship satisfaction and the intention to separate in married couples]. *Zeitschrift für Familienforschung - Journal of Family Research*, 24, 85–104.
- O'Brien, T. B., DeLongis, A., Pomaki, G., Puterman, E., & Zwicker, A. (2009). Couples coping with stress: The role of empathic responding. *European Psychologist*, 14, 18–28. doi:10.1027/1016-9040.14.1.18
- Papp, L. M., Kouros, C. D., & Cummings, E. M. (2009). Demand-withdraw patterns in marital conflict in the home. *Personal Relationships*, 16, 285–300.
- Papp, L. M., & Witt, N. L. (2010). Romantic partners' individual coping strategies and dyadic coping: Implications for relationship functioning. *Journal of Family Psychology*, 24, 551–559. doi:10.1037/a0020836

- Pasch, L. A., & Bradbury, T. N. (1998). Social support, conflict, and the development of marital dysfunction. *Journal of Consulting and Clinical Psychology, 66*, 219–230. doi:10.1037/0022-006X.66.2.219
- Patterson, G. R., & Reid, J. B. (1970). Reciprocity and coercion: Two facets of social systems. In C. Neuringer & J. L. Michael (Eds.), *Behavior modification in clinical psychology* (pp. 133–177). New York: Appleton-Century-Crofts.
- Perrez, M., & Reicherts, M. (1992). *Stress, coping and health. A situation-behaviour-approach: Theory, methods, applications*. Toronto: Hogrefe & Huber Publishers.
- Proulx, C. M., Helms, H. M., & Buehler, C. (2007). Marital quality and personal well-being: A meta-analysis. *Journal of Marriage and Family, 69*, 576–593. doi:10.1111/j.1741-3737.2007.00393.x
- Randall, A. K., & Bodenmann, G. (2009). The role of stress on close relationships and marital satisfaction. *Clinical Psychology Review, 29*(2), 105–115. doi:10.1016/j.cpr.2008.10.004
- Recchia, H. E., Ross, H. S., & Vickar, M. (2010). Power and conflict resolution in sibling, parent–child, and spousal negotiations. *Journal of Family Psychology, 24*, 605–615. doi:10.1037/a0020871
- Rehman, U. S., Janssen, E., Newhouse, S., Heiman, J., Holtzworth-Munroe, A., Fallis, E., & Rafaeli, E. (2011). Marital satisfaction and communication behaviors during sexual and nonsexual conflict discussions in newlywed couples: A pilot study. *Journal of Sex & Marital Therapy, 37*, 94–103. doi:10.1080/0092623X.2011.547352
- Revenson, T. A., & Lepore, S. J. (2012). Coping in social context. In A. Baum, T. A. Revenson, & J. Singer (Eds.), *Handbook of Health Psychology, 2nd Edition* (pp. 193–218). Psychology Press.
- Robles, T. F., & Kiecolt-Glaser, J. K. (2003). The physiology of marriage: pathways to health. *Physiology & Behavior, 79*, 409–416. doi:10.1016/S0031-9384(03)00160-4

- Robles, T. F., Slatcher, R. B., Trombello, J. M., & McGinn, M. M. (2014). Marital quality and health: A meta-analytic review. *Psychological Bulletin*, 140, 140–187.
doi:10.1037/a0031859
- Rogge, R. D., & Bradbury, T. N. (1999). Till violence does us part: The differing roles of communication and aggression in predicting adverse marital outcomes. *Journal of Consulting and Clinical Psychology*, 67, 340–351. doi:10.1037/0022-006X.67.3.340
- Rogge, R. D., Bradbury, T. N., Hahlweg, K., Engl, J., & Thurmaier, F. (2006). Predicting marital distress and dissolution: Refining the two-factor hypothesis. *Journal of Family Psychology*, 20, 156–159. doi:10.1037/0893-3200.20.1.156
- Ruffieux, M., & Bodenmann, G. (2011). *Fragebogen zu Alltagspositivität [Questionnaire of positive everyday interaction]*. Unpublished manuscript, Department of Psychology, University of Zurich, Zurich, Switzerland.
- Ruffieux, M., Nussbeck, F. W., & Bodenmann, G. (2014). Long-term prediction of relationship satisfaction and stability by stress, coping, communication, and well-being. *Journal of Divorce & Remarriage*, 55, 485–501.
doi:10.1080/10502556.2014.931767
- Sandberg, J. G., Harper, J. M., Jeffrey Hill, E., Miller, R. B., Yorgason, J. B., & Day, R. D. (2013). “What happens at home does not necessarily stay at home”: The relationship of observed negative couple interaction with physical health, mental health, and work satisfaction. *Journal of Marriage and Family*, 75, 808–821. doi:10.1111/jomf.12039
- Schilling, E. A., Baucom, D. H., Burnett, C. K., Allen, E. S., & Ragland, L. (2003). Altering the course of marriage: The effect of PREP communication skills acquisition on couples’ risk of becoming maritally distressed. *Journal of Family Psychology*, 17, 41–53.

- Schmitt, M., Kliegel, M., & Shapiro, A. (2007). Marital interaction in middle and old age: A predictor of marital satisfaction? *The International Journal of Aging and Human Development*, 65, 283–300. doi:10.2190/AG.65.4.a
- Seider, B. H., Hirschberger, G., Nelson, K. L., & Levenson, R. W. (2009). We can work it out: Age differences in relational pronouns, physiology, and behavior in marital conflict. *Psychology and Aging*, 24, 604–613. doi:10.1037/a0016950
- Sierau, S., & Herzberg, P. Y. (2012). Conflict resolution as a dyadic mediator: Considering the partner perspective on conflict resolution. *European Journal of Personality*, 26(3), 221–232. doi:10.1002/per.828
- Smith, D. A., Vivian, D., & O’Leary, K. D. (1990). Longitudinal prediction of marital discord from premarital expressions of affect. *Journal of Consulting and Clinical Psychology*, 58, 790–798. doi:10.1037/0022-006X.58.6.790
- Smith, T. W., Berg, C. A., Florsheim, P., Uchino, B. N., Pearce, G., Hawkins, M., ... Olsen-Cerny, C. (2009). Conflict and collaboration in middle-aged and older couples: I. Age differences in agency and communion during marital interaction. *Psychology and Aging*, 24, 259–273. doi:10.1037/a0015609
- South, S. C., Krueger, R. F., & Iacono, W. G. (2011). Understanding general and specific connections between psychopathology and marital distress: A model based approach. *Journal of Abnormal Psychology*, 120(4), 935–947. doi:10.1037/a0025417
- Stafford, L. (2003). Maintaining romantic relationships: A summary and analysis of one research program. In D. J. Canary & M. Dainton (Eds.), *Maintaining relationships through communication: Relational, contextual, and cultural variations* (pp. 51–77). Mahwah, NJ: Lawrence Erlbaum.
- Stanley, S. M., Markman, H. J., & Whitton, S. W. (2002). Communication, conflict, and commitment: Insights on the foundations of relationship success from a national survey. *Family Process*, 41(4), 659.

- Story, T. N., Berg, C. A., Smith, T. W., Beveridge, R., Henry, N. J. M., & Pearce, G. (2007). Age, marital satisfaction, and optimism as predictors of positive sentiment override in middle-aged and older married couples. *Psychology and Aging, 22*, 719–727. doi:10.1037/0882-7974.22.4.719
- Stuart, R. B. (1969). Operant-interpersonal treatment for marital discord. *Journal of Consulting and Clinical Psychology, 33*, 675–682. doi:10.1037/h0028475
- Sullivan, K. T., Pasch, L. A., Johnson, M. D., & Bradbury, T. N. (2010). Social support, problem solving, and the longitudinal course of newlywed marriage. *Journal of Personality and Social Psychology, 98*, 631–644. doi:10.1037/a0017578
- Thibaut, J. W., & Kelley, H. H. (1959). *The social psychology of groups*. New York: Wiley.
- Umberson, D., Williams, K., Powers, D. A., Liu, H., & Needham, B. (2006). You make me sick: Marital quality and health over the life course. *Journal of Health and Social Behavior, 47*, 1–16. doi:10.1177/002214650604700101
- Weiss, R. L., Birchler, G. R., & Vincent, J. P. (1974). Contractual models for negotiation training in marital dyads. *Journal of Marriage & Family, 36*, 321–330.
- Weiss, R. L., & Heyman, R. E. (1997a). A clinical research overview of couples interactions. In W. K. Halford & H. J. Markman (Eds.), *Clinical handbook of marriage and couples interventions* (pp. 13–41). New York: John Wiley & Sons.
- Weiss, R. L., & Heyman, R. E. (1997b). A clinical-research overview of couples interactions. In W. K. Halford & H. J. Markman (Eds.), *Clinical handbook of marriage and couples interventions* (pp. 13–41). Hoboken, NJ, US: John Wiley & Sons Inc.
- Weiss, R. L., Hops, H., & Patterson, G. R. (1973). A framework for conceptualizing marital conflict, a technology for altering it, some data for evaluating it. In L. A. Hamerlynck, L. C. Handy, & E. J. Mash (Eds.), *Behavior change: Methodology, concepts, and practice* (pp. 309–342). Champaign, IL: Research Press.

- Wills, T. A., Weiss, R. L., & Patterson, G. R. (1974). A behavioral analysis of the determinants of marital satisfaction. *Journal of Consulting and Clinical Psychology*, 42, 802–811.
- Woodin, E. M. (2011). A two-dimensional approach to relationship conflict: Meta-analytic findings. *Journal of Family Psychology*, 25, 325–335. doi:10.1037/a0023791
- Wunderer, E., & Schneewind, K. A. (2008). The relationship between marital standards, dyadic coping and marital satisfaction. *European Journal of Social Psychology*, 38, 462–476. doi:10.1002/ejsp.405

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